

Social Functioning of Children with Low Vision

*A study on Participation of Five Primary School Children with Low
Vision in Social Activities in Uganda*

Rhesas Hallary UYIRWOTH



Master of Philosophy in Special Needs Education

Department of Special Needs Education

Faculty of Education

University of Oslo

Norway

Spring 2008

ABSTRACT

The study investigated social functioning of children with low vision (CWLTV). Factors which may influence their participation in social activities were particularly explored, basing on their own experiences.

It was a qualitative study which purposively involved five CWLTV from one school. Data was collected through interviews, consultation of documents and spontaneous information. Interaction and communication, games and play, co-operation and support, and challenges experienced by the CWLTV were the centres of interest in the study.

The study found that communication among the CWLTV and other people in the school was motivated by interpersonal relationship and the need for help by the CWLTV. The CWLTV were also teased by the sighted peers at school. They were however, generally interested in participating in games. Some of them supported one another and co-operated with other people in the school, while others did not. The CWLTV did not require guidance in movement, except in the evening. Some sighted peers and teachers dictated notes, brailled and transcribed examinations, and located materials for the CWLTV but others did not provide such help. Trained teachers for the CWLTV were also inadequate in the school.

It is suggested that regular assessment of the children's functional vision be done by involving a multi-disciplinary team to determine possibilities for intervention; teachers should be reoriented through refresher courses and upgrading in order to acquire skills of helping CWLTV. The CWLTV should be exposed to a variety of social activities and their efforts rewarded. Physical modifications, acceptance, collaboration and personal initiative by the CWLTV themselves may eventually improve their social functioning in the school.

DEDICATION

This research is dedicated to my beloved dad Silas, mama Sera; Doreen, Winifred, Praise and the entire **Zugai** fraternity.

ACKNOWLEDGMENTS

I give special thanks to God my creator; my parents, Mr. & Mrs. Wacibra Silas Hawkins for your love and support; to Doreen, Winifred and Praise for your patience during my absence.

I am grateful to the Department of Special Needs Education, Kyambogo University for the interest in building my academic and professional career. Special thanks to Eron Lawrence (the Dean of Faculty of Special Needs Education) and all the staff in the Department.

I sincerely thank the office of the Chief Administrative Officer and the District Education Officer, Nebbi District Local Government for their co-operation. I extend more thanks to the staff and pupils of Angal Girls' Primary and Blind Unit School under the leadership of Rev. Sr. Balbina Raciú for their hospitality, not forgetting my informants (children with low vision).

I commend Denese Brittain and the staff in Department of Special Needs Education, University of Oslo for the commitment in this project. Without your support, I would not have come this far. I am very pleased with Professor Steinar Theie for his wisdom demonstrated through his mature advice during the study and the rapport he created during all our meetings, Professors Miriam Skjørten and Einar Sletmo and Liv Randi Opdal for your unforgettable assistance rendered to me. To John, your advice was timely and is highly appreciated.

I dearly thank the government of Norway through the NORAD/NCP Fellowship program for all the facilitation offered; and Lyn Josephson for effective services rendered as an advisor for the NORAD/NCP Fellowship students.

Lastly my student colleagues thank you for all the interaction and intellectual discussions.

TABLE OF CONTENTS

ABSTRACT.....	3
DEDICATION	5
ACKNOWLEDGMENTS.....	7
TABLE USED	15
LIST OF APPENDICES	17
LIST OF ABBREVIATIONS AND ACRONYMS USED	19
1.0 INTRODUCTION AND BACKGROUND.....	21
1.1 INTRODUCTION	21
1.2 BACKGROUND TO THE STUDY	21
1.3 STATEMENT OF THE RESEARCH PROBLEM	23
1.4 SIGNIFICANCE OF THE STUDY	24
1.5 STRUCTURE OF THE THESIS	25
2.0 THEORETICAL FRAME WORK.....	27
2.1 DIFFERENT PERCEPTIONS OF LOW VISION	27
2.1.1 <i>Manifestation of low vision in children</i>	28
2.1.2 <i>Testing low vision in children</i>	30
2.1.3 <i>Visual impairment</i>	30
2.2 GUIDED PARTICIPATION	31
2.3 MEDIATED LEARNING	33
2.3.1 <i>The Zone of Proximal Development (ZPD)</i>	36
2.4 PSYCHOSOCIAL PERSPECTIVES OF LOW VISION.....	37
2.4.1 <i>Social functioning</i>	37
2.4.2 <i>Practical knowledge</i>	37
3.0 METHODOLOGY	41
3.1 INTRODUCTION	41

3.2 RESEARCH DESIGN	41
3.3 METHODS OF DATA COLLECTION.....	42
3.3.1 Interview.....	42
3.3.2 Instrument.....	43
3.3.3 Procedure of administering the interview guide.....	44
3.3.4 Information from documents	45
3.3.5 Spontaneous information.....	45
3.4 POPULATION	46
3.5 SAMPLE AND SAMPLING PROCEDURE	46
3.6 PROCEDURE FOR DATA COLLECTION.....	47
3.7 ORGANISATION AND ANALYSIS OF DATA.....	48
3.8 CONSIDERATIONS FOR VALIDITY AND RELIABILITY	50
3.8.1 Descriptive validity.....	50
3.8.2 Interpretive validity	51
3.8.3 Theoretical validity.....	51
3.8.4 Other attempts to reduce threats to validity and reliability.....	52
3.9 ETHICAL CONSIDERATIONS	53
3.10 FIELD CHALLENGES.....	53
3.11 SOME REFLECTIONS ON THE INTERVIEWS.....	54
4.0 PRESENTATION AND ANALYSIS OF DATA	57
4.1 BACKGROUND INFORMATION ABOUT THE CASES	57
4.2 INTERACTION AND COMMUNICATION	60
4.2.1 Preference in conversation.....	60
4.2.2 Reasons for the children's preference in talking to people	60

4.2.3 Other people's reaction during conversation with the CWLV.....	61
4.2.4 Talking to peers during lessons	62
4.2.5 Talking to peers during break and lunch time.....	63
4.2.6 Involvement/participation of children with low vision in conversation, debate, discussion and class demonstrations	64
4.3 PARTICIPATION IN GAMES AND PLAY	66
4.3.1 Games played with sighted peers	66
4.3.2 Games played with peers with visual impairments.....	67
4.3.3 Games played under teacher's guidance.....	67
4.3.4 Games played alone	68
4.3.5 Opinion about playing alone and in a group.....	69
4.3.6 Preferred time for playing games.....	70
4.4 CO-OPERATION AND SUPPORT	70
4.4.1 Help given to CWLV by sighted peers and teachers in movement within the school compound	70
4.4.2 Help given by teachers in classroom activities.....	71
4.4.3 Help given by sighted peers to the child with low vision in classroom activities	72
4.4.4 Locating text books and learning materials	73
4.4.5 Help in games outside classroom by sighted peers and teachers.....	74
4.4.6 Willingness of CWLV to help other people in the school.....	75
4.5 DIFFICULTIES EXPERIENCED BY CHILDREN WITH LOW VISION.....	76
4.5.1 Difficulties experienced when talking to sighted peers, teachers and other children with visual impairments.....	76
4.5.2 Difficulties experienced during games with sighted peers.....	77
4.5.3 Difficulties experienced during games/play with fellow children with visual impairment	78

4.5.4 Difficulties faced when seeking for help from teachers and sighted peers during classroom activities	78
4.5.5 Difficulties experienced when seeking help from sighted peers in classroom activities....	79
4.5.6 Influence of the difficulties on the children's participation.....	80
5.0 DISCUSSION, CONCLUSION AND RECOMMENDATIONS	83
5.1 DISCUSSION	83
5.1.1 Interaction and communication.....	83
5.1.2 Participation in games and play.....	87
5.1.3 Co-operation and support	89
5.1.4 Difficulties experienced by children with low vision	92
5.2 CONCLUDING REMARKS	95
5.3 RECOMMENDATIONS	96
5.3.1 Educational/functional assessment of CWLV.....	97
5.3.2 Teacher training	97
5.3.3 Use of appropriate feedbacks	98
5.3.4 Physical modifications.....	98
5.3.5 Creating a welcoming environment.....	98
5.3.6 Strengthening co-operation among CWLV and sighted peers.....	99
5.3.7 Collaboration with different stake holders	99
REFERENCES	101
APPENDIX I - SAMPLE OF MEDICAL ASSESSMENT REPORT	109
APPENDIX II - SEMI-STRUCTURED INTERVIEW GUIDE FOR CHILDREN WITH LOW VISION	111
APPENDIX III - LETTER OF INTRODUCTION FROM THE UNIVERSITY OF OSLO	113
APPENDIX IV - REQUEST FOR PERMISSION TO CARRYOUT THE STUDY	115
APPENDIX V - LETTER OF REQUEST TO THE HEADTEACHER.....	117

APPENDIX VI - LETTER OF CONSENT	119
APPENDIX VII - SAMPLE TRANSCRIPT OF THE INTERVIEWS	121
APPENDIX VIII - CODES USED FOR ANALYZING DATA.....	131
APPENDIX IX - TIME FRAME FOR THE STUDY.....	135

TABLE USED

Table 1: Cases and Pseudonyms

LIST OF APPENDICES

Sample of medical/functional vision assessment	I
Semi-structured interview guide	II
Introductory letter from University of Oslo	III
Letter requesting for permission from the D.E.O. Nebbi District	IV
Letter of request to the head teacher Angal Girls' primary school	V
Letter of consent to informants.....	VI
Sample transcript of the interviews.....	VII
Codes used for analyzing data.....	VIII
Time frame for the study.....	IX

LIST OF ABBREVIATIONS AND ACRONYMS USED

CWDs Children With Disabilities

CWLVIChildren with Low Vision

EFAEducation For All

PWVIPersons with Visual Impairment

UNISEUganda National Institute of Special Education

UNESCOUnited Nations Education, Scientific and Cultural
Organization

UPE Universal Primary Education

ZPDZone of Proximal Development

1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction

The study was conducted in Nebbi district, north-western Uganda. It investigated social functioning of children with low vision (CWLTV) in one primary school. Factors which may influence participation of CWLTV in social activities were particularly the centre of focus. The concept *Social activities*, is hereby used to refer to classroom and outdoor tasks which CWLTV perform in close collaboration with peers and teachers. They include; play/games, group discussions, conversation and story telling, sharing things and helping one another among others. Children with low vision in the school selected for this study receive formal education together with their sighted peers in the mainstream classes, sometimes referred to as inclusive classes. However, they receive additional support from special needs teachers in a resource room. A resource room is a special classroom in which children with special needs are given additional educational support within an ordinary school. This chapter therefore presents the introduction and background to the study, statement of the research problem, the research question, significance of the study; and, structure of the thesis.

1.2 Background to the Study

The traditional Ugandan society was characterized by stigma and isolation of children and young adults with barriers to learning and development (Matovu 2003). He adds that, different names with negative implications were used to label children with disabilities (CWDs) in various parts of the country. This was, and is still evident among the Alur people, a tribe in north-western Uganda, where this study was carried out. The Alur people use names like *abinga* for persons with visual limitations, *udhing* for persons with hearing impairment and *abelu* for those with developmental disabilities (ibid. 2003).

Matovu (2003) further states that some communities have over protected and hidden CWDs from the public while others have used them as sources of income by making them beg on the streets or in villages. He argues that CWDs are hidden because in many parts of Uganda, illness and handicap are thought to be caused by witches, ancestral spirits or local gods who must not be offended lest they become angry and worsen the situation.

Such labels could easily result into socio-emotional challenges among different groups of children with disabilities including CWLV, hence limiting their opportunity to participate in conversation and other social activities in school and the community. Besides, it could make CWLV play a second rate role in the society.

In Uganda, children with visual impairment to which group CWLV belong however, were considered to be more obviously educable than those with other physical and sensory difficulties; therefore, they were the first to receive education among other children with varying needs (ibid. 2003). Unfortunately, there were no significant provisions for CWLV enrolled in primary schools.

Later on, laws, legislations and trends were formulated to guarantee children with low vision the right to education and participation in an inclusive environment. In 1996, Universal Primary Education (UPE) policy was launched in Uganda and implemented in 1997. This led to increase in enrollment of children with special needs in primary schools by 800% from 26.429 in 1997 to 218.286 in 2002 (Ministry of Education and Sports, 2004). Some facilities for learning are currently being provided for CWLV. Over 1000 teachers have also been trained in Special Needs Education by Ministry of Education and Sports in conjunction with former Uganda National Institute of Special Education (UNISE), now Kyambogo University. Whereas such initiatives are assumed to boost social functioning of CWLV in school, the children's attempt to demonstrate their social potentials in the school could be undermined and to some extent promoted by factors explored in this study.

1.3 Statement of the Research Problem

Education is acknowledged globally as a basic human right (Article 26 of the Universal Declaration of Human Rights 1948). In order to empower and support CWDs effectively, the government of Uganda has ratified international trends/declarations explained below besides the national laws and legislation.

Similar laws, legislations and policies have also been formulated at local level by the government of Uganda to promote education and welfare of children with disabilities and special needs. Article 30 of The Constitution of The Republic of Uganda (1995) states that: “All persons have a right to education.” Under the Universal Primary Education and Inclusive Education provisions currently being implemented in Uganda, children with low vision are encouraged to learn in ordinary schools with their sighted peers. One of the motives is to enable them get help and learn more from one another through joint participation in social activities (Ministry of Education and Sports 1998).

The launching of Universal Primary Education in 1997 and implementation of Inclusive Education in Uganda have greatly boosted enrollment of children with low vision in primary schools. The main goal of UPE is: to provide the minimum necessary facilities and resources to enable Ugandan children of school-going age (6-12 years) enter and remain in school and complete the primary cycle of education (ibid. 1998). Priority was given to children with special needs, girl child and orphans.

Today, 7.2 million children are enrolled in primary schools compared with only 2.7 million in 1996. Of these, 51.1% are boys and 48.9% are girls. Literacy rates have risen from 54% in 1991 to 63% today, (77% among men and 51% among women) (Ministry of Education & Sports 2002). Similarly, overall national expenditure on education has increased by more than 30% since 1997. Despite these improvements, 13-18% of the 6-12 year-olds in Uganda does not attend school because of other financial limitations in spite of the free primary education introduced. The government introduced affirmative action at university level in 1991 to allow an extra 1.5 points for girls in addition to their score. This measure has increased the

enrollment of girls at the University by 35% over the last ten years. However, dropout rates for girls at primary school level remain at 39% compared with 33% for boys at the same level (ibid. 2002). By 2001, a total of 40,316 children with visual impairments (including those with low vision), representing 23.28% were enrolled in primary schools in Uganda (Ministry of Education & Sports (2006, p. 35). The report however, shows that the enrollment of such children keeps on reducing as the grades progress possibly due to the high dropout rate (4.7% and repetition of classes (10%). Teachers are nevertheless, being given training on gender issues and psychosocial support measures in order to be able to help the children in the schools.

The study was also motivated by the need to expand low vision services in ordinary schools as well as institutional demand to develop personnel in the area of low vision. The knowledge acquired would in turn be shared with other stake holders in education to help CWLV participate in social activities at school.

All the laws and legislations cited here in, provide a legal basis for improving the social status and quality of life of CWDs in general and CWLV in particular through effective implementation. The reasons stated, made the phenomenon of social functioning a fertile ground for this research with CWLV. It was therefore; necessary to carry out the study which might hopefully, suggest some ways to improve the situation in the primary school selected and other schools with similar traits.

Research question

The following question was formulated to guide the study:

What factors may influence participation of children with low vision in social activities in a primary school, and in what ways?

1.4 Significance of the Study

Given the current emphasis on inclusive education and Education for All (EFA) target by 2015 at local and international levels (UNESCO 2008 Global Monitoring Report), it is important to address specific issues concerning abilities and limitations

of different kinds of children enrolled in primary schools. It is hoped that the study will be useful in the following ways:

The study could provide ideas about examples of challenges and opportunities regarding the social status and co-existence of CWLV with peers and other members of the school community where they are enrolled. This may provide a better possibility for intervention by stake holders in the education of CWLV.

The study could also give examples of some ideas about positive ways teachers, peers and care givers could involve CWLV in various social activities within the ordinary primary school context. This might help reduce the rate of idleness among some of the children as well as improve the social climate of the school/class. This might eventually influence positively the attitudes of the CWLV towards other people in the school and vice versa.

1.5 Structure of the Thesis

The thesis has been divided into five main chapters, all being interlinked to one another. Chapter one provides a general introduction and background to the study, explanation of the research problem, research question and significance of the study. In chapter two, relevant theoretical concepts are presented and clarified in addition to other related literature. The chapter highlights the understanding and relevance of guided participation and mediation to children's social functioning. Other topics included are: different perceptions of low vision, manifestation of low vision in children, testing low vision in children, psychosocial perspectives of low vision, and, previous research. The third chapter concerns the research methodology. It describes the research design, methods used to collect data and instruments, population, sample and sampling procedure, procedure for data collection, presentation and analysis of data, validity and reliability, ethical considerations; and, limitations of the study. Chapter four covers presentation and analysis of the research findings. The analysis is based on themes and sub-themes which emerged after data collection. These include: basic information about the cases, interaction and communication,

participation in games and play, co-operation and support, difficulties experienced; and, coping strategies. Chapter five contains discussion of the findings, concluding remarks and possible suggestions. These are then followed by list of references and appendices.

2.0 THEORETICAL FRAME WORK

The study focused on social functioning of CWLV in a primary school. In particular it investigated factors which may influence participation of the children in social activities. This chapter reviews some of the psychosocial perspectives of children's development and some ideas in the concepts *guided participation* and *mediated learning*, which are linked to participation of CWLV in social activities. Other topics covered in the review include: different perceptions of low vision, manifestation of low vision in children, and functional vision assessment in CWLV.

2.1 Different Perceptions of Low Vision

According to Nielsen (1997) and Barraga (1964) low vision implies difficulty in reading small prints regardless of correction. Corn & Koenig (1996) state that a person with low vision is one who has difficulty accomplishing visual tasks regardless of correction, but who can improve his or her ability to accomplish the tasks with the use of compensatory visual strategies, low vision and other devices, and environmental modifications. They focus on functional rather than medical perspective of low vision.

Low vision is also perceived as a significant reduction of visual function that cannot be fully corrected by ordinary glasses, contact lenses, medical treatment and/or surgery (Takeshita 2008). Takeshita points out further, that low vision affects performance of daily activities such as reading, cooking and watching television. People with severe low vision may be classified as partially sighted and/or legally blind. Whereas the definition of low vision considers both medical and functional perspectives, the latter takes precedence in this study given the nature of the phenomenon under investigation. The medical aspects however, are used to give a background to onset and development of low vision among the children.

Similarly, University of Michigan Kellog Eye Centre (2008) describes low vision medically as a level of vision that is 20/70 or worse and cannot be fully corrected

with conventional glasses. This description draws a distinction between low vision and blindness. A person with low vision possesses some useful sight which can enable him/her perform some activities requiring the use of the sense though with limitations. A child with severe low vision may not recognize images at a distance or be able to differentiate colors of similar tones. The distinction between low vision and blindness is because a person is declared legally blind when the best corrected central acuity is less than 20/200 (perfect visual acuity is 20/20) in the better eye, or one's side vision is narrowed to 20 degrees or less in the better eye (ibid. 2008).

Low vision involves a lack of acuity (amount of details which the eye can see), which means objects appear blurred; it also involves a reduced ability to distinguish colors, see contrasts or determine spatial relationships among objects (All about Vision 2007).

The reduction in visual function as pointed out in the above definitions therefore, may limit participation of CWLV in many activities which they could do together with their sighted peers in the school. Some of the CWLV may not be able to identify objects of play and other materials. The children's movement to connect different activities may also be hindered because; low vision is characterized by clumsiness in task performance, awkward movement and imprecision (Wadidi 2005). The impairment may make some CWLV display queer behaviours such as rocking, aggressiveness and fear which may make sighted some peers isolate them in play and other social activities in the school.

2.1.1 Manifestation of low vision in children

Vision loss can occur at anytime to anyone regardless of age and may be due to trauma (cortical vision loss), drug abuse and heredity among factors (All about Vision 2007). This document points out the need for CWLV to receive low vision rehabilitative services from relevant specialists including teachers and parents in order function better both at school and home. It also requires these personnel to have an understanding of characteristics that CWLV may display. Symptoms of low vision include, but not limited to: difficulty recognizing objects at a distance,

difficulty differentiating colours and difficulty seeing well at near distance. The symptoms may not necessarily mean that one has low vision. However, a person who experiences one or more of such difficulties needs to contact an ophthalmologist (eye doctor) for a complete examination. The eyesight of a person with low vision may be hazy from cataracts, blurred or partially obscured in the central visual zone because of macular degeneration or distorted and/or blurred from diabetic retinopathy. Also, people with glaucoma or retinitis pigmentosa can lose peripheral vision and have difficulty seeing at night (ibid. 2007).

Considering this notion, loss of vision is seen as a traumatic experience which may result into frustration and depression. The condition may eventually have a negative impact on daily physical and social activities especially for the children who are in school. As a result, some CWLV may develop fear or lose the motivation to participate in interaction and play which involve their peers in the school. Takeshita (2008) identified some of the indicators below, which may be used to identify low vision in children basing on the characteristics they may display:

Appearance: eyes shake or wander randomly, eyes are not able to follow parent's face, pupils of the eyes are excessively large or small, pupils of the eyes are not black; they appear to have a cloudy film on them, and, eyes do not appear to be evenly lined up; they cross or turn outward

Behaviour: rubs eyes frequently, does not appear to focus with central vision, turns or tilts head when looking at detail, covers or closes an eye when looking at detail, avoids close work or becomes tired after close work, can see better during the day than at night, complains of tired eyes, squints eyes, sits very close to the television, and, has difficulty walking and running; appears clumsy.

It should however be noted that whereas these indicators Takeshita has listed are useful yardsticks for identifying CWLV, some of the children may not exhibit many of such indicators; at the same time, others may have seemingly normal sight which may challenge the identification endeavour. Again, the differences in environments to which the children are exposed and availability of tools for vision screening may

also influence the process of determining the children's visual performance; hence, this may either limit or facilitate their social participation.

2.1.2 Testing low vision in children

Vision tests may be necessary for CWLV. They may help determine the extent of the children's useful vision and facilitate any support that might be required for their functioning. Michigan Kellog Eye Centre (2008) identifies aspects of vision that may be examined in children; they include: refraction (to assess vision and determine the prescription for glasses, if glasses may be of any use), visual field (to assess the peripheral vision) and ocular motility (to assess how well the eyes move).

The aspects considered in low vision testing are key determiners of how well CWLV are able to perform social activities both at school and at home. Although vision testing may not guarantee participation of CWLV in activities, it may be argued that when the tests are interpreted, they provide some useful information for teachers, peers and caregivers about the social needs of CWLV; for instance, the tests may suggest some possible adaptations which include among others: use of large print, good contrast and use of tactile materials for some of them. Teachers and sighted peers could help CWLV participate during lessons and other activities by making use of these suggestions and supporting them in planned activities.

2.1.3 Visual impairment

Arditi & Rosenthal (1998) define visual impairment as loss of vision which constitutes a significant limitation of visual capability resulting from disease, trauma, or a congenital or degenerative condition that cannot be corrected by conventional means, including refractive correction, medication, or surgery. Visual impairment is also perceived as an umbrella concept which includes all degrees of visual loss: mild, severe and total loss (Skjørten 1997, p. 35). The definitions imply that visual impairment is a consequence of loss of vision rather than the eye disorder itself. Therefore, CWLV represent a sub-sector of persons with visual impairment.

2.2 Guided Participation

Barbara Rogoff is the proponent of the concept *guided participation*. Rogoff (2003) emphasizes that, development of individuals is exhibited by their participation in the community, engaging with others in shared endeavors. She believes that Involvement and participation of children in shared socio-cultural activities encourage them to play key roles together with their peers and adults in learning and extending the ways of their communities. Rogoff underscores the importance of interaction, play, providing variety of free and structured situations, and child focused conversation for the children's development. She further underlines cultural process as a basis for human development, acknowledging that human beings live a life full of constraints and possibilities. Rogoff's ideas create the understanding of patterns of human development by reflecting on similarities and differences in communities' practices and traditions. Hatano & Inagaki (2000) point out that, children may be socialized in their modes of thought even before they are able to participate in activities. For example, parents often talk to children about aspects of the world in conversation that reflect cultural models shared in the community.

Rogoff notes that children's functional abilities should not only be seen from the point of view of schooling and preparation for the use of academic discourse at the expense of other important engagements to their learning. Children often initiate conversation with adults including their peers, which help them learn more from one another. Children may take initiative in observing and becoming involved in on-going activities regardless of parents' effort to help them learn. (Rogoff 1990, Rogoff et al. 2003), in B. Rogoff (2003). In her view, the children's participation can be facilitated by the use of tools and involvement with cultural institutions. Putnam (1993) argues that children need to work and play co-operatively with others and that pro-social behaviours in children can be increased through co-operative learning together with other practices. In addition, Webster & Roe (1988) emphasize the idea of promoting children's social development by adults exposing children to different environments to expand their knowledge. They maintain that the social environment

in which children live, play and learn helps them to understand the world around them and act on it accordingly. Jane & Cheryll (2006) found that the student they studied enjoyed a high level of popularity in the classroom; and in his teachers' opinions he was a social equal with his classmates. As a result, note taking, in particular, became a co-operative activity, in which a sighted classmate would dictate notes to the student, who would in turn print out two copies, one for each of them.

Whereas the concept of guided participation does not focus directly on CWLV, the idea seems to apply to them as well because CWLV are first and foremost 'children'; they belong to the group to which the concept of guided participation is linked. Hence, they too need to be helped by adults, teachers, sighted peers and care givers to become active members of the school community. When CWLV are involved in co-operative activities, it may be possible for some of them to rediscover their self-esteem and become full participants in various social activities together with their sighted colleagues at school. However, this may differ from one child to another and may be a gradual process.

Rogoff presents two basic processes of guided participation which include mutual bridging of meanings and mutual structuring of participation. The former process highlights the need for seeking a common perspective or language to communicate ideas and co-ordinate efforts. The mutual understanding between people occurs in interaction, which is possible when other people are involved. Rummel 1976 perceives interaction as sequences that occur between individuals (or groups), who modify their acts, actions or practices. Involvement and participation of children in shared socio-cultural activities therefore, encourages them to play key roles together with their peers and adults in learning and extending the ways of their communities. Rogoff identifies social referencing as a powerful way to receive and give information. These may include: variation in intonation, timing and emotional tone to give more meaning to care giver's message (Rogoff 2003, p. 286).

In the latter process, Rogoff emphasizes structuring of situations by children and care givers through choice of activities that are accessible to children's observation and

engagement besides in-person endeavours, conversations, recounting of narratives and involvement in routines and play. Rogoff uses some situations to highlight this process; for instance, in structuring children's opportunities to observe and participate, she says children can be encouraged to make their own choices regarding which activities to participate in.

Rogoff identifies further the distinctive forms of guided participation, some of which could be relevant for promoting socialization among CWLV in a primary school where teachers may represent the parents. These include: providing academic lessons in the family; where parents engage children in conversation and child-focused topics, inducing children to participate in lessons, using adults as peers in play and child-focused conversation and learning through listening in. Warren (1984) found that children with visual impairment including those with low vision depend on others to integrate the external environment into a concrete and meaningful world. Fraiberg (1977) however, argues that intervention is necessary in order to help parents of children with visual impairments create a conducive environment for social interactions and physical stimulation in which the children are allowed to take risks.

Guided participation therefore, recognizes the role of parents, teachers, adults, care givers and peers in promoting children's social participation without discriminating CWLV. Collaboration among these different groups as well as demonstration of positive feelings towards CWLV may be advocated in order to boost their participation in social activities. Personal initiative and willingness of individual child with low vision may also contribute to their acceptance in social events involving sighted peers and other members of the school.

2.3 Mediated Learning

Vygotsky (1978) supports the idea of children's participation through his concept of mediation and the Zone of Proximal Development (ZPD). He points out the need for mediation of children by adults and care givers in order to help them achieve goals using signs and tools. Vygotsky argues that children acquire a variety of information

by imitating adults and being instructed about how to act. The idea seems to be relevant for CWLV because they need adult and peer intervention in order to realize their potentials not only in academics but also the social domain.

Klein, et al. (1996) found that sibling relationship seems to provide a natural setting for practicing and mastering new skills. They note that pre-schoolers use same strategies that mothers use in order to foster learning and mediate between toddlers and their environment. They attempted to focus the young children's attention and raise their level of affective involvement by introducing activities with meaning, organize the learning process in sequential order, and promote the younger child's sense of competence. Similarly, the findings of a study carried out by Ruffman (1998) indicate that peer relationship may affect cognitive development both directly, by offering a unique context for guided participation in learning activities, and indirectly, by providing opportunities for children to observe interactions among older siblings and their peers.

Alenyo (2001), in his study about quality of teaching CWLV in primary schools in Uganda, found that while social acceptance was accorded to children with low vision in some schools; mistreatment and stigma prevailed among some teachers and other members of the school community. On a positive note, he found that some CWLV were able to demonstrate active social participation together with their ordinary peers. Alenyo further indicated that some sighted children tried to show interest in interacting and playing with CWLV, but others teased and isolated them.

In a school, sighted children and teachers may also represent the siblings; therefore, when they develop relationship with CWLV, they can help them acquire a variety of social skills which can facilitate their participation. Besides, teachers and sighted children need to show commitment in working with CWLV so they may develop trust in them and gain confidence during their participation in activities.

According to Feuerstein (1990), children are exposed to two types of learning situations: *direct learning* which includes an unmediated interaction between learning material and the child's mind. He points out that if the child's mind is ready to accept

this material it will benefit from it; but if the child does not know how to accept the material, cannot identify its meaning, or does not know how to respond, the second type of learning, the *mediated* one, becomes important. He defines mediated learning experience as:

“A quality of interaction between child and environment which depends on the activity of an initiated and intentioned adult who interposes him/herself between the child and the world” (Feuerstein, 1991, p. 26).

In the process of such mediation the adult selects and frames stimuli for the child, creates artificial schedules and sequences of stimuli, removes certain stimuli and makes the other stimuli more attractive. In a similar study, Parsons (1986) found that children with low vision were delayed in the development of play skills when compared to normally seeing peers. This hindered their ability to know the function of objects or how to play with them.

CWLV may be placed in those two groups Feuerstein has identified; some of them who experience mild visual limitations and have a mental picture of the material may be motivated to interact with it. On the paradox, children with severe low vision who may not have been exposed to similar materials before, may not easily accept to interact with it due to fear that it might be harmful to them. Such CWLV may need an adult, teacher or capable peers to mediate the activity of interacting with such a material. This may also require the mediators to describe the characteristics of the material so the children may accept it. Again, mutual relationship and co-operation between the child and the mediator may motivate him/her to participate actively in activities engaged in.

Vygotsky clarifies that ‘Mediation of the learning experience’ is a form of intervention by focusing on experience during the processes of thinking and learning and aims at facilitating effective learning behaviour. Mediation therefore focuses on: expansion of the learner's zone of proximal development, providing the learner with insights into him/herself as a learner, providing the learner with insights into the effectiveness of the learner's present capabilities, processes and strategies, enhancing the transference of learning into new situations which the learner will encounter,

increasing the capacity of the learner to scaffold (support) and mediate their own learning in future; and thus, is largely about learning how to learn. Vygotsky therefore, argues that mediation reduces the need for scaffolding by increasing the capacity of learners to provide their own scaffolding (Lisbeth 1992).

2.3.1 The Zone of Proximal Development (ZPD)

Vygotsky notes that in order to discover the actual relations of the developmental process to learning capabilities, it is necessary to determine at least two levels of development in an individual. He called the first level *actual developmental level*; that is, the level of development of a child's mental functions that has been established as a result of certain already completed development cycles. This means it is only those things that a child does on his/her own which reveal their actual level of development. He called the second *level of potential development*; this level is achieved through problem solving under adult guidance or in collaboration with more capable peers. Vygotsky therefore, defines the ZPD as:

“The distance between the child's actual level of development as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (L.S. Vygotsky 1978, p. 86).

Vygotsky clarifies that the ZPD defines the functions that have not yet matured but are in the process of maturation. In short, the ‘actual developmental level’ characterizes mental development retrospectively, while the ZPD characterizes mental development prospectively (ibid. 1978, p. 86). As Miller (1993) has noted, Vygotsky's particular interest was in how the zone operates in explicitly instructional settings. He argues that instruction is based on the assumption that a child's own functioning can be changed by improving the patterns of social interaction.

Based on these notions, it is possible that emphasis on mediation and the ZPD could help CWLV learn more and improve their social functioning through a joint participation in activities. It also provides them opportunity to be supported in the tasks they are not capable of doing independently. As CWLV engage in imitation of

adults and peers demonstrating a variety of activities, they learn the skills and eventually try to perform such activities on their own. This however, might require some level commitment and consistency on the part of the teacher/peer mediator in case of a primary school. Use of positive reinforcements by the mediators and peers could also help sustain the interest of CWLV engaged in the activities.

2.4 Psychosocial Perspectives of Low Vision

2.4.1 Social functioning

Social functioning denotes ability of an individual to adhere to and display appropriate behavior acceptable by the society where they live. It is characterized by positive initiations which include: greeting one another, verbal and non-verbal interactions, joining group activities/participation; sharing in group activities such as following group rules, turn-taking, exhibiting appropriate behaviours and adherence to group decisions (Sacks, et al. 1997, p.105-106).

Participation of CWLV in social activities could be influenced in different ways. It is therefore, necessary to review some psychosocial elements when discussing the subject in relation to CWLV enrolled in primary schools. Corn (1987) emphasizes that many CWLV seem to be at a social distance with their peers and out of control of choosing their lifestyles. She proposes that CWLV be exposed to practical knowledge and life activities.

2.4.2 Practical knowledge

Corn (1987) addresses the concept of practical knowledge which he claims to be the tool set necessary in the construction of normal life experiences. The concept is closely linked to participation and involvement of children in activities. In Corn's opinion, practical knowledge results in identity, relationships and interesting life activities (ibid. 1987). Practical knowledge may also be associated with personal, social or occupational information. All students acquire practical information through living, initiating, experiencing, interacting, problem solving and risk taking.

Schinazi (2007) notes that human beings adapt and live based on constant feedback from the family, community and friends. He adds that feedback allows for the control and organization of actions and provides checks on behaviour; thus, delivery of feedback is crucial during such activities and can have an important effect on one's sense of identity, self-concept and esteem. Similarly, Wagwau (2008) emphasizes that negative statements lower children's self-esteem and make them vulnerable to fear and self-doubt. The effect of such negative statements from sighted peers, teachers and other people in the school's vicinity may also be seen in withdrawal of some CWLV from social activities in the school.

Corn (1987) argues that although the needs of CWLV are similar to those of children who are blind (people complete loss of vision), they are often unnoticed in various ways. He uses two examples to illustrate this view: both individuals will need to have a street sign announced when travelling on a bus but the one with low vision will frequently be forgotten; blind children may be told that they are being called on in class, but the unknowing teacher will nod his/her head, expecting that the child with low vision will see that it is his turn to respond to a question.

The issues raised above seem imply that knowledge about variation in the children's functional vision is necessary for all persons working with such children. While some CWLV have vision which supports movement and performance of tasks which require use of sight, others who have severe visual loss may not benefit from visual instructions as well as gestures. They may require the environment where they live and study to be modified and adapted to suit their needs in order to facilitate their social participation.

Teachers and sighted peers need to help CWLV during various activities; for instance, when children are to locate a book in the library, the child with low vision could also be guided to identify the books he/she needs instead of expecting the books to be availed all the time by the teacher (ibid. 1987). This may give the child with low vision opportunity to explore the library and retrieve a book as well as all the incidental information and interactions that naturally occur. Jane & Cheryl

(2006) found that teachers also encouraged socialization with peers of a child with low vision whom they studied through the use of co-operative learning strategies. Some teachers used both homogeneous and heterogeneous groupings to ensure that all the students worked with each other while others used literature circles and chose the student with low vision as a library helper to maximize opportunities for social interactions and leadership roles.

Sports and leisure are also considered as important life activities which not only bring CWLV closer to other people in the community, but also help them realize their potentials. APSEA Sports Manual (2003) acknowledges the role played by sports in strengthening self-esteem and ability of CWLV to overcome difficulties; besides, they help to normalize the children's living environment. Visual impairments impose limitations on the ease with which children acquire information about their peers, dress, and activities; this, in turn, affects their ability to develop physical and social skills (MacCuspie 1996), in APSEA Sports Manual (2003). Ponchillia (2002) observes that sports facilitate the development of positive self-esteem, building social skills and friendships, and providing pleasure among CWLV. In support of this argument, Hundey & Cohen (1999) note that lack of participation in sports and recreational activities could limit peer interactions, friendships and, thus, a negative impact on self-worth. They observe further that as these children progress through school, activities that require good physical development and agility are closely associated with social groups and that the number of mutual friends as well as peer social standing have been found to contribute uniquely to children's overall social adjustment.

Considering these arguments, it might be necessary for the schools to include social skills which are disability-friendly in their curriculum. At the same time, teachers of the CWLV could place socialization as a priority for training such children. It should be noted that some CWLV may not experience serious social problems in the school; therefore, they should be encouraged so they can maximize their potentials and become full participants in the social activities.

3.0 METHODOLOGY

3.1 Introduction

The study investigated social functioning of children with low vision (CWLTV) in a primary school. It focused on the children's own experiences about factors which may influence their participation in social activities in a school. The research question was as follows:

What factors may influence participation of children with low vision in social activities, and in what ways?

This chapter describes the research design, methods of data collection and instruments, population, sample and sampling procedure, procedure for data collection, presentation and analysis of data, validity and reliability, ethical considerations and limitations of the study.

3.2 Research Design

The study is a qualitative one, based on an explorative-descriptive case study. Qualitative research emphasizes use of words rather than figures in the collection and analysis of data (Bryman 2004). The factors which influence participation of CWLTV were explored through the research questions, semi-structured interviews and consultation of documents. The individual interviews enabled the informants to respond freely to the phenomenon under study. Descriptive research helps to identify problems with current practice, justify current practice, and make judgment or determine what others in a similar situation are doing (Polit & Beck 2004, p. 192). Descriptive approach was therefore found appropriate in addition to the explorative one as it provided the possibility of obtaining more information about the characteristics displayed by the CWLTV as well as the patterns of their interaction and participation in the social activities. Gall, Gall & Borg (1996) acknowledge that case study design investigates a contemporary phenomenon within its natural context. The contexts in this case were determined by the activities in which CWLTV

participated together with their sighted peers and teachers. They include some parts of the school such as classroom, resource room, book store and play grounds.

Through Case study design, it was possible to use the instruments that facilitate interaction with the informants and probing to express their personal experiences. Strauss & Corbin (1998) emphasize that qualitative research concerns people's lives, social interaction and relationships. In relation to this study, it implies that the factors which influence participation of CWLV can be described better by themselves based on their experiences. The interviews can therefore facilitate interaction and rapport between the investigator and the informant. CWLV were used as cases in the study. A *case* refers to a particular instance of a phenomenon to the researcher (Gall, et al. 2007, p. 633).

3.3 Methods of Data Collection

Data was collected mainly using interviews; however, it was also necessary to supplement the interview data by consulting documents containing demographic information and functional vision assessment of the CWLV. Some additional information was also provided by the children spontaneously. The various sources of data were used to obtain other important issues which have a bearing on the children's social participation, but were not distinctly covered during the interviews. These include demographic details and functional vision assessment. Such additional information therefore, helped me validate some of the findings.

3.3.1 Interview

Interview was the main data collection method. It was appropriate for the study because it provided a better possibility to obtain in-depth information about the children's participation. As Silverman (2000) has noted, qualitative interviewing enables the participants to describe the social world in their own terms/words and give their experiences and interpretations of the social world around them.

Kumar (1999), discusses some disadvantages of interview in the context of research: he says it is time consuming and expensive when potential respondents are scattered over a wide geographical area; the quality of data depends on the quality of interaction between the interviewer and interviewee; the interviewer's skills, commitment and experience; quality of data may vary when many interviewers are used; and, the researcher may introduce his or her bias in the framing of questions. In this study, it was evident that some informants could not easily respond to some of the questions asked; this might have affected the quality of the data in some instances. However, some of the foreseen obstacles were dealt with during the pilot study.

Borg and Gall (1989) emphasize the flexibility, adaptability and human interaction as a unique strength of qualitative interview. Besides, interview also allows subjectivity as a possible weakness. For this reason, caution was made to avoid such a situation by allowing the children express their opinions without interfering and suggesting responses for them. The *emic* perspective was considered important because the responses required were to be backed by the children's own experiences rather than my own because I was an outsider (*etic* perspective). *Emic* refers to the concept of insider perspective, that is having personal experience of a situation; and *etic* refers to the idea of "outsider perspective," which is the perspective of a person who has not had a personal or "lived" experience of a particular situation (Janette 2005). Ary et al. (1990), agree that interviews are more expensive and time consuming than questionnaires.

3.3.2 Instrument

In order to ensure that every aspect of the questions was answered, I used semi-structured interview guide. The interview guide contained open-ended questions. The introductory section of the guide contained some questions which provided demographic information about the informants. Additional demographic information was also obtained from the documents consulted, which provided useful information for understanding the children's social functioning. As noted by The World Bank

Group (2008), semi-structured interviews involve the preparation of an interview guide that lists a pre-determined set of questions or issues that are to be explored during an interview. The guide then serves as a checklist during the interview and ensures that basically the same information is obtained from a number of informants; in this case, the CWLV. Semi-structured interview is flexible; hence, it allows new questions to be brought up during the interview as a result of what the interviewee says (ibid. 2008). On that note, the interview guide was designed in such a way that it allowed probing questions which emerged during the interview sessions.

Construction of the semi-structured interview guide involved identifying main aspects of the children's social functioning in relation to the research problem as well as the theories. The aspects included Interaction and Communication (the process of sharing information with others by speaking, writing, moving the body or using other signals (Cambridge Advanced Learner's Dictionary 2005)), Participation in games and play, Co-operation and support, and Challenges experienced by CWLV in all these aspects. Guiding questions were formulated under each of these aspects to allow open-ended responses from the informants. The same guide was used for all the informants to ensure consistency of the instrument. However, the interview guide was built up in such a way that it provided room for modifications without changing the meaning and focus of the questions. This was to help informants who could not easily interpret some of the questions respond appropriately.

3.3.3 Procedure of administering the interview guide

The interview guide was translated into Alur language before it could be administered to the informants. This provided informants better possibility to express themselves than they would if it was in English. Informants were encouraged to add some more data which they found useful after the interview; for instance, some of them added more data about difficulties they experienced during play and classroom activities. The responses were written in a note book and later integrated into the findings for those particular children.

The interviews were done at school during morning break to avoid the tendency of the children becoming tired due to long school day. The interviews were conducted in a quiet room in the school to avoid distraction by non-participants. Time and venue for the interviews were arranged in consultation with the school authorities to avoid inconveniences. Flexibility was ensured by watching signs of fatigue and where necessary, breaks during the sessions were allocated for the children who needed. The interviews were recorded with a video camera so it could be easier to refer to specific parts of the sessions during the transcription process. It also reduced the risk of guessing responses which might have been forgotten. Similarly, the video camera covered information which was provided through gestures and body language as well as some physical aspects of the school. Flexibility of the instrument also made it possible to re-interview some of the children when additional information was required.

3.3.4 Information from documents

I obtained documents concerning results of medical examinations of the CWLV from the school administrator (head teacher). The information in the documents was the latest, provided by a team of medical doctors who visited the school as part of their routine outreach program on March 21, 2007. Main aspects of the document included: personal information, previous eye surgery, and full diagnosis, prognosis for vision, visual assessment, and action needed. The documents were used to collect additional information regarding the children's visual capacity, strengths, weaknesses and other significant information. Such information was necessary because it backed some of the findings from the interviews and provided an idea about why the children functioned the way they did in the school.

3.3.5 Spontaneous information

Some CWLV, who remembered the responses they had forgotten during the interviews, approached me and gave the information. As mentioned earlier in section 3.3.3, the information mainly concerned difficulties the CWLV experienced during play and classroom activities. The information was recorded in a note book and later

integrated into the transcription. A combination of all these sources eventually made the data richer.

3.4 Population

Dale (2006) notes that population for a particular study must be defined in a specific way to provide readers a clear understanding of the applicability of the study to its particular situation and the understanding of that same population. He claims that it also helps to select a proper method of sampling for such a study. The population for this study consisted of CWLV in primary four, five and six of ages 12 – 16 years enrolled in ordinary primary schools in Nebbi district. The district was selected because I was able to speak the local language of the area. The aim was to ease interaction with the informants during the entire period of data collection as some of the children had difficulty expressing themselves fluently in English; some established primary schools into which more CWLV have been enrolled also exist in the district; hence, it was easier to find CWLV to be selected for the study instead of searching for them in schools where they were not recognized; and, the district as well as the schools which enrolled CWLV were accessible to me in terms of transport and security.

3.5 Sample and Sampling Procedure

Initially, I had planned to involve two primary schools in the study. However, one school was later on left out because the CWLV who would have been selected suddenly dropped out of the school. Therefore, one primary school (Angal Girls' primary) was purposively selected for the study. The initial intention of comparing the findings on the basis of the two schools was therefore not possible; nevertheless, it was still possible to obtain rich data from the informants in the school which was finally selected. The comparison of the findings was based on the responses from the CWLV in the chosen school only. The school was purposively selected because I wanted to involve CWLV who were able to explain and describe the situation regarding their social functioning by themselves verbally. Another

reason was due to the difficulty in finding more of such children in the school as they were mixed with other children who are blind. Purposive sampling can be used when the researcher's focus is on a typical case (Robson 2002, p. 265). Similarly, Gall, Borg & Gall (2003) argue that purposive sampling aims at selecting cases that are likely to be rich in information in that they could be able to provide more examples of the phenomenon of social functioning as they experience it in the school. Based on these arguments, five CWLV (three girls and two boys) were selected as cases from classes, four to six. Purposive sampling enabled me select CWLV who seemed to display varied participation in social activities with the help of their class teachers. Besides, there were only two boys with low vision in the classes chosen; hence, both of them had to be included in the study.

3.6 Procedure for Data Collection

Blodgett, Lisa, Boyer, Wanda, Turk & Emily (2005) state that identifying and respectfully interacting with key personnel, or gatekeepers, is very important as is recognizing the power hierarchy an investigator is entering into within the community. I followed a legal procedure of carrying out an empirical study by securing a letter of introduction from the Department of Special Needs Education, University of Oslo to conduct the study in Uganda; I also contacted the District Education Officer - Nebbi district Local Government administration and the head teacher (administrator) of Angal Girls' primary school for permission to collect data in their areas. A letter of consent was designed for all the informants who willingly accepted to participate in the study and signed the letter (Appendix VI).

Prior to the study, I visited the school five times due to its nearness with a view of familiarizing myself with the CWLV and their teachers by chatting with them. This was done so they might not see me as a stranger during the study since the interviews involved face-to-face interaction with the children. The familiarity eventually improved the children's co-operation with me, which was manifested by their willingness to respond to the questions I asked them during the interviews. The pre-

visits were also intended to make appointments with the selected CWLV for the interviews.

The interview guide was tried out in a pilot study. The pilot study was carried out on one child with low vision who was studying in a different school. It was an ordinary school which did not enroll children with severe visual difficulties. The pilot study helped me re-adjust some questions and improve my approach during the main study. A question like: “How do the difficulties, if any affect your participation in the activities mentioned?” was not easily interpreted by the child during the pilot study because it seemed ambiguous. The question was rephrased by pointing out specific activities in which each of the CWLV reported difficulties; for instance, *What do you do when your sighted colleagues refuse to allow you play together with them?* I also realized that the child’s attention span was rather short; I therefore needed to give him some breaks in between the interview session. I had to consider giving breaks for informants as frequently as they needed during the main study in order to avoid boredom, which might have hindered their efforts to participate in the interview. The pilot study eventually gave me some ideas about the prospective challenges in the main study and provided some insight into ways of managing them.

The process of collecting data was spread between July, 2007 and November, 2007. The study was conducted for approximately four months. July, 2007 and part of August were entirely used to seek permission for the study. During this time, pupils were engaged in examinations and preparations for holidays; data collection started in September, 2007 after the holiday had ended. To some extent, the holiday delayed the process of collecting data and transcribing the interviews because the children stayed at home for one month; besides, some of the CWLV did not return to school promptly at the beginning of the term.

3.7 Organisation and Analysis of Data

Interpretational analysis was used to organize and present the raw data collected. Yin (1994); Gall, Gall & Borg (2007) clarify that in interpretational analysis, themes and

patterns that can be used to describe and explain the phenomenon being studied. Data from the interviews with all the children were organized in categories and coded. This was aimed at highlighting specific aspects of the data for easier interpretation. Richards (2005) advocates focusing on interesting sections of data and looking at its context, consequences and the hypothesized strategies of the actor. She further emphasizes the process of memo writing/annotation in this case, as a means of recording the ideas that arose from the initial interaction with the data. To do this, I wrote some comments on every interview situation. The comments were based on my general interpretation of the behaviour exhibited by the children during the interview sessions as well as the general atmosphere of the environment in which the interviews were conducted. The comments provided some useful information for analyzing and discussing findings of the study.

The selected CWLV were treated as cases; however, their findings were organized and presented according to themes and sub-themes identified for analysis. Their responses were also contrasted within the themes and sub-themes instead of treating each case individually. The main categories were pre-defined in the interview guide in order to ensure that all the aspects were covered during the interviews.

As Thorne (2000) has noted, qualitative research usually relies on inductive reasoning processes to interpret and structure the meanings that can be derived from data. In the analysis therefore, data was broken down into specific sub-categories which focused on particular aspects of the children's participation in social activities. Comparison of the findings from the children was done. Conclusion was then drawn after accomplishing all those initial steps. Richards (2005) explains further, that as one forms a category system, the project changes radically. The uncoordinated collection of ideas is transformed into a filing system which, like the library catalogue, will ensure that you know where a node is, and where a new node should go. This process helps to remove or merge a lot of the categories made earlier, and the result is a smaller, tighter and organized system of ideas. This approach was found useful for organizing the data; hence, I used the computer to organize the nodes. In addition, I used copy and paste procedure in order to obtain a complete document for each of the

categories. The themes and sub-themes which were identified therefore formed the basis for analyzing the findings.

Every interview conducted was video recorded and later transcribed for each informant both in Alur and English. The videos were played back and carefully listened to during the course of transcribing in order to tap every useful part of the interview. The transcriptions were done word by word; these included the interviewer's questions and interviewees' responses. I made some comments for every interview to clarify important issues which were raised or observed during the interview sessions.

I integrated some relevant information obtained from the records into the analysis. As such, the information helped to highlight the children's responses and in some cases, the information provided more understanding about the children's participation in social activities. A case in point was that, all the CWLV were assessed to have vision which supports movement and performance of simple visual tasks. This information confirmed the response from all the CWLV that they did not need much help from the peers and teachers in movement, especially during the day.

3.8 Considerations for Validity and Reliability

Validity concerns relevance of the data to the research problem. It ensures that the study measures what it intended to measure (Gall, et al. 1996). Maxwell (1992) identifies four types of validity in qualitative research: descriptive, interpretive, theoretical validity, generalizability and evaluative validity. For the purpose of this study, the first three types of validity are discussed because a small sample was involved and the findings are not intended to be generalized.

3.8.1 Descriptive validity

The first concern of qualitative researchers is with the factual accuracy of their account (ibid. 1992). Descriptive validity therefore ensures that information seen or heard is not made up or distorted by the researcher. It also helps to avoid mis-

hearing, inaccurate transcription and mis-remembering words and statements made by the informant. Validity of this study was thought to be threatened by factors such as: possible transcription errors, and forgetfulness among other factors. In order to minimize these threats, the interviews were recorded using a video camera and transferred to the computer. The interviews were transcribed by watching and listening attentively to the video and noting down the dialogue word by word, first in the local language and later in English; the non-verbal behaviours displayed by the children were also included in the transcription; and, field notes were taken in addition to the video recording to ensure accuracy of the data.

3.8.2 Interpretive validity

Qualitative researchers are not only concerned with providing a valid description of the physical objects, events and behaviours in the settings of the study; but also the meanings attached to the objects, events and behaviours from the perspective of the people engaged in and with them (ibid. 1992). Interpretive validity seeks to comprehend phenomena from the participant's point of view – that is, from an emic rather than an etic perspective (Bohman 1991, Headland, Pike & Harris 1990), in Maxwell (1992, p. 289). Some of the children's sentences which gave more meaning about their participation in social activities were quoted from the interviews and later on interpreted. Similarly, relevant information from documents and the field notes were used to provide better understanding of the situation as experienced by the CWLV in addition to the interviews.

3.8.3 Theoretical validity

Theoretical validity goes beyond concrete description and interpretation and explicitly addresses the theoretical constructions that the researcher brings to, or develops during the study (ibid. 1992). Therefore, theoretical validity refers to an account's validity as a theory of some phenomenon. In this case, the phenomenon of the children's social functioning was backed by some theoretical concepts such as: mediated learning and guided participation. The research problem was formulated in such a way that it covered aspects of children's participation emphasized in the

theories. At the same time, some of the questions formulated in the interview guide focused on important concepts in the theories; for instance, interaction and communication, co-operation and support, games and play. Questions under these concepts (themes) provided a link between the theories and the research problem. The behaviour and participation of CWLV were described and interpreted on the basis of such theoretical concepts and their personal experiences.

3.8.4 Other attempts to reduce threats to validity and reliability

Reliability refers to the extent to which other researchers would arrive at similar findings if they studied the same case, using exactly the same procedures used in the previous study (Gall et al. 2003, p. 460). Reliability is considered a more relevant terminology in quantitative research paradigm; nevertheless, it may still give some ideas about the dependability of the study (Lincoln and Guba 1985). In N.Golafshani (2003).

I carried out a pilot interview to enable me refine the instrument and make necessary adjustments before the main study was conducted. It was again necessary to seek feedback from colleagues and professors in the department who constructively criticized the research manuscript during the course of writing. The interview guide was translated and the interviews were conducted using the local language of the area which the CWLV understood and spoke more fluently than English. This enabled the CWLV to express their views better than they would have if the interview had been conducted in English. I contacted some competent persons who helped me verify samples of the transcribed interviews. However, I should point out that it is upon the readers to decide how they can apply the findings of this study in different contexts where CWLV are involved in social activities together with their sighted counter parts. As Gall, et al. (2003) has noted, the findings could mainly be relevant to the selected cases. Nevertheless; the findings may also perhaps, provide some useful ideas for other schools with cases of CWLV under similar social conditions.

3.9 Ethical Considerations

In an attempt to minimize likely ethical challenges in the study, the following were done: the research proposal was submitted to the Department of Special Needs Education, University of Oslo for approval before collecting data; letter of informed consent was designed and issued to CWLV who signed it to confirm their willingness to participate in the study. The children's parents could not be traced easily to request them to allow their children to be involved in the study. This was because the parents were staying in distant places; besides, they never visited their children at school. The parents were therefore, represented by the headmistress of the school. It was also necessary to seek permission from the CWLV to record their interviews in order to avoid suspicion over the data collected; the data was kept confidentially; the CWLV were also assured that their identity would not be revealed in the study. In the thesis; they were instead represented by the following numerical codes and pseudo names:

Table 1: Cases and Pseudonyms

Cases	Pseudonyms/gender
1	Daniel (male)
2	Vicky (female)
3	Grace (female)
4	Irene (female)
5	Saviour (male)

3.10 Field Challenges

The process of securing permission to carryout the study in the area took longer time than expected. The investigator had to wait for a period of one month before a verbal permission was granted by the Education office in the district where the study was

carried out. The delay meant that data collection exercise had to be halted until I was cleared by that office. At the school however, the headmistress responded to the request for her school to be involved in the study quickly and positively in writing (Appendix VI). This enabled me to kick start the exercise of data collection after such a delay.

The initial plan was to involve CWLV from two primary schools; unfortunately at the time of this exercise, the children who had been proposed as cases in one of the schools dropped out. I ended up with one school where CWLV were present.

During this period, there was scarcity and sudden rise in fuel price due to the political unrest in Kenya. This was challenging because the study was conducted in a rural environment where I relied mainly on thermal power to recharge the camcorder, lap top and other gadgets which were used for the field work. At some points the appointments made with some informants had to be postponed because the supportive devices for interviews could not be used because they were not recharged.

3.11 Some Reflections on the Interviews

The CWLV were generally co-operative during the interview sessions. Their behaviour exhibited seemed to suggest that their relationship with other children in the school was fairly warm in spite of the difficulties they expressed. Daniel looked initially shy when he was answering a question about the person he liked to talk to most in the school; for instance, he looked down the floor and kept playing with his fingers while he was being asked and when he was answering verbally. After a short while however, he gained confidence and listened attentively to the interviewer's questions regarding Interaction and communication and was stable when giving verbal responses. Some children in a nearby classroom made some mild noise; nonetheless, it did not interrupt the interview with Saviour (5). Likewise, the rest of the informants generally looked calm and confident during the entire interview sessions. However, Saviour (5) frequently tilted his head up towards the roof and down to the floor when he was listening to the questions I asked him. This was

probably a sign of mannerism which appears to be a common phenomenon among persons with visual impairments. Saviour scratched his head whenever a question appeared difficult and frequently paused before he could give an answer.

4.0 PRESENTATION AND ANALYSIS OF DATA

In this chapter, findings of the study are presented and analyzed. The chapter begins with a brief background of the cases based on interview data and doctor's report in the documents consulted. The background provides a basis for understanding the uniqueness and similarities in the physical, social as well as functional abilities of the five CWLV who were the cases studied.

4.1 Background Information about the Cases

Case 1 (Daniel) – Male: Daniel is fifteen years old, a pupil with low vision in primary six this year (2007). He is being brought up by his biological parents who were both alive at the time of data collection. The school where he studies has children with visual impairment who are both girls and boys, resident in the school. Daniel experiences difficulty seeing things at night or in dim light. During the day he sees with less difficulty except for printed materials at far distance. Daniel reported that his parents did not take him to any hospital for medical examination at the onset of this visual problem. On 21st March, 2007 however, eye specialists from Mulago hospital visited the school and examined his eyes together with a few other colleagues with similar difficulties. The doctor's report from the document consulted gives the following information about Daniel: he has amblyopia/refractive error in both eyes, a condition which could be improved by wearing appropriate spectacles. Daniel's distance vision both in the right and left eye is less than 6/18. The report further shows that Daniel can walk around without help, recognizes faces, can see large print, and has some useful residual vision. No other medical action was suggested for Daniel.

Case 2 (Vicky) – Female: Vicky is eighteen years old, a pupil with low vision in primary four. Vicky does not see clearly at far distance and have difficulty reading what is written on the chalkboard. The condition as she reported started when she was young. She is a total orphan being taken care of by her brother. Vicky is also a national athlete who won an international gold medal for Uganda in the B2 class of

sports for persons with visual impairment (PWVI) held in Athens, Greece. Her sight was also examined at the school the same year as Daniel by specialists from Mulago hospital. The medical report indicates that: Vicky had cataract which was extracted in both eyes. The prognosis indicates that her vision could be improved. Her distance vision without glasses is 3/60 in both eyes. Her vision supports movement, recognition of faces, print recognition and possesses residual vision. Vicky needs further low vision assessment.

Case 3 (Grace) – Female: Grace is fourteen years old. She is in primary four. Her parents are alive and are the ones bringing her up. Grace experiences pain in her eyes; she sees fairly well at night, but during the day she experiences difficulty in seeing. Grace was taken to the hospital where her eyes were operated in 2006. She was also diagnosed with cataract which was also too late for extraction in both eyes. The full diagnosis also indicated presence of amblyopia in both eyes. According to the medical report, Grace's right and left eyes could improve with time. The vision assessment indicates that Grace has distance vision of 3/60 in the right eye and 6/18 in the left. She needs further low vision assessment.

Case 04 (Irene) - Female: Irene is fourteen years old, a primary four pupil with low vision. Irene's parents are both alive. She experiences pricking pain in both eyes though she says it does not affect her much when seeing objects around her including large print. Irene was taken to the hospital and her eyes were operated. She had cataract in the right eye and aphakia in the left eye. Her vision could however, be improved. Irene's distance vision unaided is less than 6/60 to 3/60 when both eyes are open. Her vision also supports movement, recognition of faces, print recognition and possesses residual vision.

Case 5 (Saviour) - Male: Saviour is thirteen years old, a primary four pupil with low vision. Saviour complains of regular pain in his eyes. Since 2005, he experienced persistent epileptic attacks. He can see objects at near distance; he can also see large prints but cannot read them including those that are written on the blackboard. He lives with his parents who are both alive. Saviour was taken to

Kuluva hospital for medical examination prior to the visit of the doctors, who examined them in the school on 21 March, 2007. Cataract was found in both of his eyes; and the full anatomical and etiological diagnosis shows he has amblyopia/refractive error in the right eye and amblyopia only in the left eye. The report also shows that his vision in the right eye could be improved and the left eye is likely to remain stable. His distance vision in the right eye is less than 6/18 – 6/60; left is less than 3/60; both eyes open is also less than 6/18 – 6/60. Saviour's vision supports movement, recognition of faces, print recognition and possesses residual vision. He needs spectacles to improve his vision.

The information above shows that the CWLV are being brought up by their own parents, except Vicky who is the only orphan in the group. The nature and extent of support given by the children's parents and guardians were not the focus of this study; however, knowledge about whether or not their parents are alive and staying together with them could provide some useful information about the children's socio-emotional behaviour as well as their participation in social activities. The doctor's medical assessment seems to indicate that refractive errors especially amblyopia and cataract were the common causes of the children's visual impairment. Although some variations were noticed in the children's visual performance, the report implies that the CWLV are capable of performing some visual tasks including movement with less guidance. Some of the children whose vision was recommended for glasses do not have any possibility to acquire them due to the high cost and scarcity of some particular types of glasses recommended. The children's visual capacities as established and other demographic data provided therefore determine their participation in various social activities in the community which is dominated by sighted people.

4.2 Interaction and Communication

4.2.1 Preference in conversation

The CWLV were asked about preference for interaction and communication. The responses varied from one child to another; for instance, Vicky (2) said she liked to talk to everybody in the school; Grace (3) said she liked to talk to teachers more than other people. Irene (4) differed in her response when she expressed more interest in talking to the Matron more than other people in the school. On the same question, Saviour (5) precisely mentioned two children: Bridget and Isaac, both of whom have visual impairment. Like Saviour, Daniel (1) also showed interest in talking to particular people in the school; at the same time, he was free to talk to other people as well. He says:

“I like talking to a certain girl in our class. I converse with her almost everyday in my class; and also my colleagues who have visual problems, with whom I share dormitory as well as the cooks in the school”.

The children’s responses indicate that each one of them had special preference for someone to talk to in the school. Interestingly, their preferences cut across people in different positions in the school; for instance, peers, teachers and Matron as reported above. It also shows that the CWLV tried to engage in conversation and making friends in the school. The extent of their conversation with the preferred people in the school however, is still unclear.

4.2.2 Reasons for the children’s preference in talking to people

The children gave various reasons why they preferred to talk to the people they chose. Some of them said they were used to one another, very close friends and because the friends treated them well (Daniel (1), Irene (4) and Vicky (2)). Irene illustrated her preference by saying; the Matron helped her with drinking water whenever she felt thirsty. So, it is because of the good relationship among the children and other members of the school community that they are able to talk to one another without much difficulty. Saviour (5) stated that he liked talking to Bridget

more than other people because they are relatives. Grace (1) said, “I prefer talking to teachers to fellow pupils because teachers give me knowledge”. When probed further on why she particularly preferred teachers to fellow pupils, she lamented:

“I also like to talk to my colleagues; however, some teachers do not relate well with me; so, I do not talk much to such teachers. I like to talk to those who relate well with me; I also like talking to many other school mates without preference because they talk to me in a friendly way and they lend me whatever I request from them; when we quarrel, we resolve the conflict and maintain our friendship.”

The children’s responses indicate that they were motivated by particular factors to talk to the persons whom they chose in the school. The factors, as reported by Daniel (1), Vicky (2), Grace (3) and Irene (4) include: familiarity with one another, friendship and special assistance offered to them by such persons they preferred to talk to. At the same time others seemed to have been motivated by their relationship at home, as in the case of Saviour (5). Relationship seems to be an important factor for interaction and communication among the CWLV and other members of the school community.

4.2.3 Other people’s reaction during conversation with the CWLV

In order to establish the perception of other people about interacting and communicating with CWLV, the informants described how other people in the school reacted to them during informal conversation. Daniel (1) commented: “My conversation with them is fairly good; but some of them are so brief that I can not talk to them longer than I need”. Daniel adds that his sighted peers often say a few words and disappear when he still wants to talk to them. Whereas Grace (3) reports that some teachers and pupils are fond of teasing her, Irene (4) and Saviour (3) said they received positive reaction by their peers in conversation; for instance, Irene lamented: “They talk to me in a friendly way and lend me whatever I request them too immediately”. On the same subject, Vicky (2) also said:

“We disagree with those bad things we have seen or heard and when I am telling a story, some children attend to it, but others do not”.

The responses reveal that CWLV experienced mixed reaction from different members of the school community in that some showed positive feelings to them during conversation, others were seemingly un-interested in sustaining dialogue with them (Daniel (1), Vicky (2), Irene (4) and Saviour (5)). On the negative extreme, teasing as cited by Grace (3), could easily limit the children's participation in interaction and communication; the opposite could instead act as a positive challenge which might eventually strengthen relationship among the children during dialogue. The situation could also be related to the social orientation the children had in their families, given that most of them are being brought up by their biological parents, with exception of Vicky (2) who is an orphan as indicated in the background information (4.1). In her opinion, her condition seems to have had a negligible effect on her conversation with other people in the school.

4.2.4 Talking to peers during lessons

Daniel (1) and Grace (3) reported that they talked to their colleagues about answering questions. Daniel for instance; said that whenever he failed to get answer to a particular question, he asked his colleagues and they told him what it was; also when he wanted to copy some notes, he asked them to lend him their books. Grace also added that she talked to other children when she wanted to borrow scholastic materials like pens. Vicky (2) played a leadership role in her class; therefore she said, "When we are telling stories, I organize the children and beat those who are shout in the class". In response to the same subject, Irene (4) lamented:

"During discussion, sometimes I keep quiet or keep on reading my notes; when it is time for telling stories, I voluntarily participate in it. I sit in the middle row; so, when my story turns out to be good, the teacher gives my row ten points."

When asked the same question, Saviour (5) paused and later replied conservatively: "When there are notes to be copied, I ask them to dictate for me". In order to enable him give a more detailed response, follow up questions were introduced; for example, he was asked about the content of his conversation with other children with visual impairments in his class. He then said,

“Sometimes when ‘Amia’ fixes her cubes wrongly, I tell her ‘this is wrong’ and then I fix them for her, but she gives the answer herself.”

The findings reveal that Daniel (1), Grace (3) and Saviour (5) generally talked to their peers and teachers whenever they needed their help during lessons. Unlike her colleagues with low vision, Irene (4) did not need to talk to her peers when she needed help. This could partly be due to her visual performance which is relatively better than that of her colleagues, following her assessment report presented in the introductory section of this chapter (4.1). It could also be that she was interested in talking to her peers and teachers on other issues apart from seeking their help. The CWLV who used ‘help’ as a gate way into their communication with peers and teachers in the classroom, did so because they experienced difficulty performing the classroom activities such as note taking, and answering questions among others independently. Their vision could not adequately support them according to the report in (4.1). It is also interesting to note that although Vicky (2) is an orphan as well as the oldest pupil (18 years old) among the cases, she managed to get a leadership position (class captain), a post which exposed her to talk to her classmates and teachers more freely.

4.2.5 Talking to peers during break and lunch time

In a bid to establish the content of the children’s talk during their free time at school, the informants were asked to explain what they often talked about during break and lunch time. Daniel (1) and Vicky (2) share the same experiences; they said that they *asked their colleagues to know how they were in the morning and afternoon*. But Daniel (1) added:

“We also ask ourselves about what the teachers taught that day; some of us may not have understood some parts of the lesson, so we explain to one another during break or lunch time.”

Similarly, Vicky (2) reiterated that during break time she talked to other children about studies. Grace (3) and Saviour (5) pointed out salutation as one of the contents of her interaction with peers. Grace (3) particularly said:

“During break time when we are going for porridge, I greet my colleagues and ask them how they are; I tell my colleagues ‘Let us go and get porridge’. I also tell them, ‘Let us go to the bath room and wash our legs’. When the porridge is not well prepared, we tell the cooks who angrily refer us to ‘Sister’ (headmistress) if we want.”

According to the findings, break time seems to provide opportunities for the children to identify themselves more with their closer friends in the school. The children’s talk at this point mainly centred on salutation, meals and reflection on previous lessons/assignments (all the cases). They mostly talked about porridge because all the CWLV are resident students in the school, whose daily menu for breakfast is porridge as reported. Break time therefore, could provide a good forum for sharing and socialization among CWLV in the school.

4.2.6 Involvement/participation of children with low vision in conversation, debate, discussion and class demonstrations

As for involvement in the above classroom activities, Daniel (1) explained that whenever someone pronounced a word wrongly, they argued while also making some fun together with the group members as they attempted to find the right pronunciation. He asked questions and gave answers where necessary. Daniel (1) says further that he told stories in the class; but participated in debate only twice. On the same matter, Vicky (2) revealed how she demonstrated her responsibility as a class captain. She then said, “When we are telling stories, I organize the children and beat those who are shout in the class”. Grace (3) also responded in a slightly different way; she said:

“During group work, I give answers and the secretary writes them on a piece of paper. I also tell stories in the class voluntarily when the time comes. When I am telling a story, some children listen, but others do not. When I have finished telling my story, the classmates say ‘thank you for the story’”.

On the same note, Irene (4) explained that during discussion, she sometimes kept quiet or instead read her notes; when it was time for telling stories, she voluntarily participated. She said sat in the middle row; so, when her story turned out to be good,

the teacher gave her row ten points. Saviour's response concentrated on demonstration of activities. He continuously repeated: "Sometimes when Amia fixes her cubes wrongly, I tell her 'this is wrong and then I fix them for her, but she gives the answer herself'".

It is interesting to note that the children reported different levels of involvement and participation in the classroom activities identified and that their limited vision did not have a serious hindrance to their involvement. This is contrary to the pessimistic view which some people might have about CWLV regarding this matter. Daniel (1) however, was honest to acknowledge his strengths and weaknesses in debate. This could be as a result of limited motivation for the activity, an issue which his teachers might need to focus on. His honesty in this regard, may make it possible for committed teachers and peers to support them while at school. Similarly, the importance of positive reinforcements during the activities as reported by Irene (4) is greatly underscored because it helps to build confidence in the children as well as contribute to their acceptance by the classmates. As for Grace (3), she experienced mixed reaction from the classmates possibly because either some of them had conflicting interests, or others did not enjoy the story she told. This is also because it is normal for people have different tastes for particular stories and other activities they are engaged in.

The children's overall responses regarding interaction and communication suggest that they had special preference for persons to whom they talked freely. Their preferences were spread to different groups of people in the school, including teachers and non-teaching staff. Their engagement in interaction and communication was motivated by familiarity, friendship and special assistance offered to them by these people. Salutation and academic issues seemed to have dominated their conversation during break time.

4.3 Participation in Games and Play

4.3.1 Games played with sighted peers

The informants mentioned different games they liked to play together with their sighted peers; for example, Daniel said he liked football game and athletics when their time came. Sometimes he played netball with girls, or run around the school compound with them. He added: “We also look for the school rabbits and send them into their house.” Vicky, Grace and Irene all reported playing mostly *netball*, *game* and *ludo* with their sighted peers. In this case, Vicky said further that she played the games together with girls of her size and some younger ones as well; other games she played with her sighted colleagues are *game*, *ludo*. But Grace added:

“I like to play a ball game called Afasi which I play together with sighted girls and other girls who experience visual problems; sometimes we play as though we were fighting”.

Besides netball Irene (4) added that she also played *up* game, where they threw a ball to each other in pairs. She did these with children who could see properly. Saviour (5) said he did not play with those children. When probed further, Saviour explained that the sighted peers also liked to play with their sighted friends; but he always sat at the verandah of their dormitory and played together with his friend Isaac.

It is clear that all the children have interest in different games played at school by the sighted peers. Some of them however, seemed to demonstrate preference for particular game played with particular children. At the same time, others did not want to play with sighted peers at all; as in the case of Saviour. The situation might be a result of differences in the children’s ages and gender among others. Saviour for instance, is the youngest child among the cases (thirteen years); therefore, he preferred to play with Isaac who is blind and his male age mate. The girls too, reported mostly playing with their female peers; nevertheless, they also played games such as *ludo* which cut across the both genders.

4.3.2 Games played with peers with visual impairments

Each of the CWLV said they were involved in *ludo* and playing cards. Daniel however, explained that he some times used to play *show down* and run with his colleagues who have visual impairment up hill. He further explains that of late, some of them had become lazy; so, they could not participate in running any more. Vicky cited a game called *ryeya* and explained; “In this game, we draw lines with corners and squash pieces of paper for the players to pick”. When explaining how they played ludo Grace said:

“In ludo game, there is a die with faces, having numbers from one to six; you shake it in a small bottle and throw it on a board; you fix something which looks like a star in it”.

Irene instead revealed that her teacher did not allow her to play. She said perhaps the teacher thought some children might steal the die. Saviour reported playing with bottle tops and described how they played it: “We spread the bottle tops on the ground and hit them with stones”.

The findings in this case show that the CWLV are generally sociable and able both to fit and engage in various social activities organised in the school in collaboration with their colleagues with visual impairment besides their sighted counterparts. Their functional vision as presented in the doctor’s report seems to help them participate in some of the games mentioned above though with difficulties, especially for Saviour (5).

4.3.3 Games played under teacher’s guidance

The children gave varied responses concerning games played under teacher’s guidance. Daniel (1) said he played chasing game together with his colleagues and the teacher; the teacher did it during time for free activity when he wanted to make them active. Vicky (2) and Grace (3) stated that their teachers guided them when they were playing ludo or in athletics. Grace however cited a specific instance of the teacher’s intervention when she explained:

“Teacher helps us when there is a disagreement about the number that has shown up after the die has been tossed, especially by children who are blind; I tell them ‘Let us ask the teacher to help us’, the teacher then settles the case”.

Irene (4) and Saviour (5) reported that their teacher (female) also taught them some songs which they sang and danced while she was playing her accordion. They also played dominoes and cards together with the teacher. Saviour further explained:

“When we are in the main classroom, the teacher makes us perform some actions; for example, yesterday we acted Sarah and Bena, Sarah saw some children running”.

The children’s experiences in this regard imply that teachers referred to above, seemed to display interest in involving them in activities aiming at socialization. In spite of the effort some of them put to help the children in games, it is unclear whether such a practice is done by all teachers in the school or not. This is because the children mentioned particular teachers who helped them in the games. Teacher’s guidance in games with CWLV could help in shaping their social as well as personality development.

4.3.4 Games played alone

In this case, Daniel (1) stated that he liked athletics; he explained that on some occasions when he was going somewhere and saw that he was going to be late, he ran. He said he could make a ball and play with it when he was alone; sometimes when he was in the stream taking a shower, he played in the water”. Grace said that she played a game called *Nali* and also skipped alone. Amazingly, both Vicky (2) and Saviour (5) revealed that they did not like to play alone in the school because it was boring. When asked why he did not like to play alone Saviour said:

“When I am alone, I always feel depressed; I always keep thinking of the day Isaac will return to school”.

The responses suggest that while some of them (Daniel (1) and Grace (3)), were engaged in playing alone besides games which involved other people, Saviour (5) and Vicky (2) were more comfortable with games that involved other colleagues. Irene

was somewhat reserved; so she could not give her opinion. The finding to some extent demonstrates a good gesture by some of the children showing interest in games aiming at socialization in the school. On the other hand, there could be some inborn reasons that motivate Saviour and Vicky to conform to solitary play. A possible reason could be conflict of interest among the children in some of the social games; or perhaps they played such games when there were no colleagues around them to join.

4.3.5 Opinion about playing alone and in a group

Each of the informants expressed preference for games involving other people. They generally showed low opinion about playing alone although some of them participated in such solitary plays. Daniel said:

“When I am playing alone, I get bored quickly; for example, when I am playing football, I have to pick the ball from another end where I have kicked it. But when I am playing with my friends, they help kick the ball back to me instead of going to pick it myself”.

Another informant (Irene (4)), commented that her colleagues showed her the correct way to do certain activities in games which she could not do on her own. In Vicky’s opinion, playing with other children makes her feel good and forget what she was thinking about. This is again what she expressed:

“When I perform well in the games, some children encourage me, but others remain unhappy about my success”.

Saviour said he felt happy when he was playing with Isaac; or when Franco, another colleague who is blind joked with them.

The findings relating to games played alone (in 4.3.5) and opinion about playing alone or in a group (4.3.6) show that the children were more positive about playing games with peers than individual games. The children’s reasons point to their openness to learn group dynamics, a need which could be accounted for by teachers, peers and care givers in the school.

4.3.6 Preferred time for playing games

Concerning time for playing games, each of the cases mentioned afternoon hours as the more preferred. They reported that playing in the afternoon was more convenient because then, the heat from the sun is not so strong. Grace however, had another specific reason for playing in the afternoon; she said:

“I normally play around this time because it is lunch time when we rest from class work.”

The time for playing games seemed to have been decided by individual child or group that found it necessary to do so. Playing in the afternoon means that the games were either self initiated or programmed by the school to be performed at such a time. It also means that during morning hours, children were engaged in lessons and other academic activities. The games played at this time could possibly be those that are self-initiated and out-of-class.

The findings about the children’s participation in games and play generally show that they were interested in playing with their sighted peers as well as those experiencing similar visual difficulties. They also revealed that some teachers intervened in some of the games they played and guided them where necessary. From the findings, it is clear that some of the children had personal preference for certain games which they played either alone or together with other peers. They preferred to play the games in the afternoon when they had finished class work and heat from the sun is no longer strong.

4.4 Co-operation and Support

4.4.1 Help given to CWLV by sighted peers and teachers in movement within the school compound

The children had some useful vision which could enable them walk in the school compound with minimum support by the sighted peers and teachers. Some who

experienced difficulty in movement kept on following people with whom they were walking in the school compound. The sighted colleagues and some teachers guided them mostly in the evening because darkness made it more difficult for them to see (Daniel (1), Vicky (2), Grace (3) and Saviour (5)) but during day time they walked without sighted guides. Similarly, Vicky (2) said her friends occasionally held her arm and made statements like:

“It is not safe there, come and pass this way”; “go towards your left or right”.

On the contrary, Irene said she had not experienced many difficulties walking in the school compound in the presence of teachers and other children, so she did not need their help in movement.

The children’s responses reflect the variation in the degree of visual loss each of them had. The responses seem to confirm the doctor’s assessment report presented in the introductory part of this chapter (4.1) which shows that the children had some useful residual vision which could support performance of tasks including movement. In this case, the teachers and sighted peers’ co-operation included provision of simple modifications in the school environment by using land marks, shore lines, contrasting colours and provision of light especially in darker areas of the school/classrooms. However, these modifications were not adequate enough to help Saviour (4) who had a more severe visual loss than the other colleagues.

4.4.2 Help given by teachers in classroom activities

Some teachers helped the CWLV mainly to explain what they had not understood from the ordinary class; for example, spelling, dictating notes and exercises. Daniel explained that the teacher gathered all children with visual problems and dictated notes for them as they copied using their Braille machines. Saviour was more particular when he said:

“Mr. Ngure shows me correct spellings of words when I am in the class; Madam Gorrety also dictates for me examination questions,

copies my answers in Braille and send to Mr. Walendu to transcribe into print”.

According to the children, other teachers, did not provide them this kind of help because they often said they did not know how to help them. Vicky mentioned that she always consulted her teacher whenever she needed help; for instance, she would ask her teacher “Sir, how is this word read?” The teacher then told her the right pronunciation. As for Irene, the teacher placed her closer to the chalkboard when she was struggling to see what was written on it.

The findings show various ways in which the children were helped by some concerned teachers in the school. Whereas some helped them by dictating notes, others showed them correct spellings, pronunciation of certain words and braille examinations among others. This implies that the teachers worked as a team to support the children, a practice which could be upheld in the struggle to support CWLV in the school.

4.4.3 Help given by sighted peers to the child with low vision in classroom activities

Like the teachers, sighted children helped their peers with low vision by dictating notes, correcting spellings and discussing assignments given by teachers (Daniel, Vicky, Grace and Saviour). Daniel cited an example of demonstration where he said:

“When we are learning about a leaf, they point to the parts of the leaf so I can see after the teacher has already named those parts for them”.

On the other hand, Irene reported that some of her classmates helped her by writing exercises for her, but left spaces for me to fill in the answers.

Co-operation seems to exist among some teachers, sighted children and the CWLV. Although the children’s vision supports movement and performance of simple tasks (section 4.1), they still needed support by the sighted peers in the classroom activities mentioned above. The support given to them is a milestone in the gradual change of attitudes of the ordinary people in the school towards such children. It still remains a

dilemma as to what fraction of the teachers and sighted children provided such help. This is because the study did not concentrate on the statistics, rather the depth of the children's experiences as already stated in the previous chapter (Methodology).

4.4.4 Locating text books and learning materials

The children reported that their teachers helped them to locate books and other learning materials they needed without hesitation. The teachers picked the books they wanted because the books were well labelled both in print and in Braille (Daniel, Vicky and Grace). Sighted peers also helped them in the same way, especially when they were free and in absence of the teachers. Daniel related an incident when a sighted colleague helped him in the library; he said, "One time I went to the library with a primary seven girl called Juliet; she willingly accepted to help me locate a certain book in Social Studies". Vicky revealed another dimension of peer co-operation by saying:

"When I lose some of the materials I use for my study, either the teacher or other children who may have found them return them to me; teachers also give me stylus, paper, Marburg and Braille machine".

The materials Vicky listed, (also Grace) were kept and used in the resource room where the children always received additional support from special needs teachers. In the resource room the teachers gave them paper and Braille rubber. Irene had better vision than her other colleagues experiencing visual difficulties; therefore she said she located the materials she wanted by herself. Saviour instead relied more on the teacher and close friends in the class; for example he said he used to get paper from the teacher and borrow cubes from his desk mate whenever his were few.

According to the children's responses, it appears they experienced less difficulty securing help of their teachers and sighted peers in locating text and non-text book materials they needed. However, the lack of training and experience in the field of low vision might have hampered the efforts of some teachers to provide such help to the CWLV. This is because the children clarified that most of the books they used were written in Braille; and so, could only be interpreted by themselves or the two

special needs trained teachers in the school. Similarly, the sighted children and such teachers without training in the area of visual impairment possibly did not know much about the special non-text book materials and other equipment needed by the CWLV.

4.4.5 Help in games outside classroom by sighted peers and teachers

Daniel (1), Saviour (4) and Vicky (2) stated that some sighted peers co-operated well with them in games outside classroom while others had low opinion about involving them in the games due to their visual limitations. Vicky added that some of the sighted peers feared that they might knock her or knocks them herself. Daniel described how he co-operated with the sighted peers and said:

“When I am playing with my friends, they help kick the ball back to me instead of me going to pick it myself”.

In the same way, Grace (3) revealed that she helped her playmates to catch the ball, run to pick it and give to the person throwing when it was not her turn. When playing ludo, they divided themselves into groups and competed. Irene (4) also pointed out a situation where her sighted colleagues denied her the chance to play with them; they often stopped her from joining them with the fear that they might hit her eyes accidentally.

The CWLV acknowledged that, teachers who showed interest in their games co-operated with them. They cited *chasing game, ludo, playing cards* and *athletics* as games in which the teachers were involved. Grace gave the following explanation about ludo:

“When there is a disagreement about the number that has shown up after the die has been tossed especially by children who are blind, we ask the teacher to help us”.

The teachers also guided them in athletics and demonstrated activities for them. Irene cited Music among the activities in which her teacher guided her together with other

classmates. She said, “Madam also teaches us some songs; we sing and dance while she is playing her accordion”.

In games out side classroom, it can be deduced that it was easier for some of the CWLV to join in social games and benefit from teacher/peer support. To the contrary, other CWLV who were probably less out going seemed to have been denied participation and help in such games with the intention of protecting them from risks of accident; this reserved group of children obviously remained adamant during most social games/activities.

4.4.6 Willingness of CWLV to help other people in the school

The CWLV said they were willing to help their sighted peers and other members of the school community who needed their assistance. On that note, Daniel (1) reported the largest share of assistance compared to other CWLV; for example, he explained:

“There was a time when the key to the library got lost; our text books were in the dormitory, so the teacher asked me to open to the page where the topic about which we were learning was and made me read the Brailled version of the contents to the class”.

Daniel (1) said further that the teacher wrote what he read on the blackboard for sighted children to copy in their books. He did this for three days until the library key was found. Besides that, he helped teachers to fetch water for washing their hands and for drinking when they requested him. Irene (4) mentioned that she lent her colleagues who did not have pens and took to teachers whatever they sent her to collect and did it happily. Saviour’s help was reported in form of food; he said:

“Sometimes when I have some money, I buy pancakes and we eat together”.

The initiatives taken by some of the CWLV indicate that they were less dependent as well as able to perform functional activities in the school. The practice could also contribute to the realization of their self-esteem and social potentials, thereby enabling them to fit into the ordinary school system.

It can therefore be said that some considerable level of co-operation existed among the CWLV and other people in the school. This was reported in the various activities during which they received help from their peers and teachers. It was also noticed that the CWLV themselves also took initiative to provide assistance to the teachers and some of their sighted peers who helped them. This is important because it reduces the feeling that the CWLV are fully dependent; as a result, whatever little assistance they give the ordinary members of the school community might improve their relationship as well as acceptance in school/classroom activities.

4.5 Difficulties Experienced by Children With Low Vision

4.5.1 Difficulties experienced when talking to sighted peers, teachers and other children with visual impairments

Varied responses were registered concerning difficulties the CWLV experienced when talking to their sighted peers, teachers and other children with visual impairment. Daniel (1), Vicky (2) and Grace (3) reported that some sighted children responded rudely to their conversation. Vicky revealed that some of the sighted children would say: “Who are you to talk to me?” whenever she initiated a conversation with them. Irene (4), Grace (3) and Daniel (1) said some sighted children and particular teachers also teased them during play to the extent that they became annoyed; sometimes they had to quarrel with them. Daniel gave the following example to that effect:

“When I ask teachers about something and they fail to get the point, they answer me in a teasing manner, this annoys me”.

Saviour’s experience was in two dimensions: while some of the sighted children talked freely to him, others did not for reasons he could not explain. Irene (4), Saviour (5) and Vicky (2) did not experience any serious difficulty in this respect; whenever some sighted children disturbed them in class, teachers punished such children. Concerning other children with visual impairment, the informants reported

that they did not face any difficulty talking to one another, but clarified that they often teased and joked among themselves (Daniel, Saviour, Vicky and Grace).

Of all the difficulties in interaction and communication, teasing was the most pronounced. This indicates that while some few sighted children and teachers tried to engage CWLV in friendly dialogue, other people in the school still seemed be sceptical about involving CWLV in the same activity due to persistent low opinion about the children's impairment among them.

4.5.2 Difficulties experienced during games with sighted peers

Daniel (1) reported that he did not experience much difficulty playing with the sighted peers. If anything, he was the one who controlled most of the games they played. Other children, (Vicky (2), Saviour (5) and Grace (3)) reiterated that they were teased by some sighted children and the play ground was unfriendly to them. In addition to what Saviour reported, he expressed sadness when he said some children pinched him when he was playing with them. Vicky (2) made the following related statement to highlight the difficulty she faced in games with the sighted peers:

“When I am playing with the sighted children, some of them begin to tease me; the play ground also has sharp stones and holes which make us get accident”.

Of the difficulties reported, teasing was outstanding. However, for some of the children (Grace (3), Daniel (1) and Vicky (2)), teasing seemed to have been experienced mainly as a way of making fun among themselves; the negative extreme nevertheless, stressed them, as was the case for Saviour (5). Grace, Daniel and Vicky therefore, experienced teasing more as a challenge than a problem perhaps because they were already used to associating with the sighted peers at school. Besides, they were older children (fourteen, fifteen and eighteen years respectively) who did not exaggerate their visual limitations. On the other hand, Saviour was the youngest in the group and often complained of pain in his eyes in addition to occasional epileptic attacks which made him even more vulnerable to the worst form of teasing (bully) by some non-empathetic peers.

4.5.3 Difficulties experienced during games/play with fellow children with visual impairment

Some CWLV experienced difficulties even when they were playing among themselves. Irene (4) mentioned that on some occasions they lacked materials to play with; their teacher even did not allow them to play ludo because he thought some of them would lose the die. Daniel (1) hinted on laziness of some CWLV in the school. Vicky (2) shook her head, indicating that she did not face any difficulty while Grace (3) and Saviour (5) repeatedly mentioned that they were teased during play even by their fellow colleagues with visual impairment. Grace (3) commented that whenever her colleagues answered her rudely in games, she also provoked them; she would tell them:

“I think you also know me; my time will come when I shall be rude to you also”.

The games referred to above (4.5.2 and 4.5.3) appeared to have attracted less difficulties emanating from the sighted children and others with visual impairment, except laziness of some of the CWLV as cited by Daniel. However, teasing, safety of the playgrounds and inadequacy of some play materials in the school remained a cause for concern. This might call for intervention by the school administration in collaboration with teachers and the children.

4.5.4 Difficulties faced when seeking for help from teachers and sighted peers during classroom activities

Responses obtained in this case varied according to the type of help CWLV sought from the teachers and sighted children. Vicky (2) complained that some teachers wrote very tiny letters which were difficult for her to see. In addition, the teacher did not give her chance to speak whenever she put up her hand during lesson delivery. Grace (3), Saviour (5) and Irene (4) said they did not have problems seeking their teacher's help; but Daniel (1) said:

“When I request the teacher to show me what I am not seeing clearly, he sometimes says I am disturbing him; he also refuses to show us, we have to depend only on what we have heard”.

According to Daniel, the teacher referred to above, did not have training and experience working with CWLV. On a positive note, he pointed out that the teachers who had knowledge and experience working with CWLV did not disturb them.

The findings in this case, point to the techniques of improving participation of CWLV. Illegibility of some particular teachers made it difficult especially for Irene (4) to recognise what ever they wrote on the chalkboard. Other difficulties were associated with negligence of some teachers to involve her in answering questions, and failure of some of the teachers to respond to the request by the CWLV as reported by Daniel (1). Besides lack of training and experience, the findings imply that such teachers are seemingly less interested as well as lack the motivation to work with the CWLV in their classes.

4.5.5 Difficulties experienced when seeking help from sighted peers in classroom activities

Some sighted peers also seemed not to be co-operative with their colleagues with low vision in classroom activities. This was confirmed by different expressions got from the informants: Daniel (1) reported further that sometimes when he wanted to copy what the teacher had written on the blackboard, other children refused to lend him their notes. Vicky (1) reiterated her previous comment that on some occasions when she wanted to talk to some of the children, they responded to her rudely. One of the sighted peers told her, “Who are you to talk to me?” Grace reported another scenario where sighted peers shouted at her when she stood up in the classroom to see what was written on the blackboard, saying: “Do you think we are drawing your picture?” their noise demoralised her and made her withdraw from reading the written task.

The experiences of the CWLV with regard to help given by their sighted peers implies that they were helped by only a small fraction of their classmates. This is

indicated by the refusal of some of the sighted peers to lend notes to their colleagues with low vision, talking hesitantly to the children as well as shutting them down whenever they attempted to read what was written on the chalkboard. This is a sign of segregation which could limit participation of CWLV in the classroom activities.

4.5.6 Influence of the difficulties on the children's participation

In spite of the difficulties reported, some of the children revealed that they continued to do what was expected of them. On that note, Daniel (1) lamented that he did not mind of whatever his sighted peers and teachers did to him, but continued to do what he felt was expected by the community, based on his own judgement. In order to reduce the risk of accidents during play/games, Grace (3), Vicky (2) and Saviour (5) said they withdrew from certain activities which they thought would make them more vulnerable to accidents. Grace (3) particularly said:

“When I want to avoid accidents, I withdraw and start doing something else”.

No doubt, the difficulties CWLV experienced in the areas presented above (interaction and communication, games and play as well as co-operation and support) had both positive and negative influence on their social functioning in the school. In order to be secure, some of the children opted to withdraw from games which they should have played together with their sighted peers as the play grounds were not safe for them. Amazingly, Daniel (1) dealt with the situations he encountered in a more mature way by doing persistently what he felt would be acknowledged by the ordinary members of the school community.

The findings relating to difficulties experienced by the CWLV were mainly associated with the nature of activities in which each one of them participated collaboratively with their peers and teachers. Whereas some of the children did not experience much difficulty playing, interacting and associating with their peers, others seemed to have been denied the opportunity to participate in various activities identified in this chapter possibly due to lack of interest, negligence and lack of expertise to help the CWLV among other factors. Based on the findings, *teasing*

seems to emerge as a distinct category. Teasing has been perceived in two dimensions: first as a motivating factor, manifested through jokes among some of the children; and second, as a stigma when it goes to the negative extreme, making CWLV who cannot contain it stressed. In order to help CWLV overcome the difficulties, it is necessary for all members of the school community to acknowledge the strengths and limitations of all the children and try to treat them as ordinary members of the community.

5.0 DISCUSSION, CONCLUSION AND RECOMMENDATIONS

As stated in the previous chapters, the study investigated social functioning of CWLV, focusing on factors which may influence their participation in social activities. This chapter presents discussion, conclusion and recommendations based on the data presented.

5.1 Discussion

Discussion of the findings is based on the research question which was designed to guide the study; thus: *What factors may influence participation of CWLV in social activities, and in what ways?* In order to answer the research question, specific aspects were identified, which later on formed the basis of the analysis. The discussion of findings is organized under the following headings: interaction and communication, participation in games and play, co-operation and support, and challenges faced by CWLV regarding their participation in the social activities. Each of the headings highlights particular aspects which are included in the discussion.

5.1.1 Interaction and communication

The findings suggest that each of the CWLV had special preference for someone to talk to in the school. Their preferences cut across people in different positions in the school; for instance, peers, teachers and Matron. This indicates that the CWLV have the ability to engage in conversation and make friends in the school. The finding agrees with Rogoff (1990) and Rogoff et al. (2003) where they point out that children often initiate conversation with adults and their peers. Whereas Rogoff talks about children generally, her idea in this case seems to apply to CWLV as well. The children's ability to identify a particular person to talk to in the school could provide a good step towards their socialization and participation.

The CWLV were motivated by particular factors to talk to the persons whom they chose in the school. These include: familiarity with one another, friendship and

special assistance offered to them by such persons. At the same time, others seemed to be motivated by their relationship at home, as in the case of Saviour (5). Creating relationship therefore, is important in interaction and communication among the CWLV and other members of the school community. It is nevertheless, unclear as to what extent the factors cited contribute to the children's motivation to engage in conversation with the people they preferred.

Again, CWLV experienced mixed reactions from different members of the school community whenever they attempted to talk to them informally. While some of the sighted children showed positive feelings to them during conversation, others were seemingly un-interested in sustaining the dialogue. Some of the CWLV were teased by their colleagues. The negative extreme of teasing could hinder their efforts to interact and communicate with their peers and teachers. The opposite could instead act as a positive challenge which might eventually be an impetus to the relationships among the children during dialogue. Similarly, Alenyo (2001) found that; whereas some sighted children tried to show interest in interacting with CWLV, others teased and isolated them.

Children who lack social and cognitive skills tend to be aggressive (Huesmann et al.1992); they exhibit less empathy than their peers (Rubin and Krasnor 1986). It might be assumed that sighted children who tease and do not show interest in talking to their colleagues with low vision do so either because of the negative attitude they have towards the children's impairment. Teasing may also be one way such sighted peers and teachers demonstrate lack of concern to help the CWLV solve personal problems by talking to them. It could also be a result of CWLV themselves not taking initiative to engage the sighted peers in daily conversation. The children's ability to make friends and engage in dialogue at school could also depend on the social orientation each one of them had at home, given that most of them are being brought up by their biological parents, with exception of Vicky (2) who is an orphan. Interestingly, Vicky's parental situation in her opinion does not hinder her from talking to teachers and other people in the school. It is possible that she may have learnt to live with both challenges of having low vision and being an orphan. This is

unique from the other CWLV.

Some of the CWLV generally talked to their peers and teachers whenever they needed help during lessons. The one, (Vicky) who did not talk to her peers when she needed help had a relatively better functional vision than her colleagues according to her medical assessment report in section (4.1) of the previous chapter. She might have instead been interested in talking to her peers and teachers on other issues apart from seeking their help. Alternatively, the CWLV who used *help* as an entry point for their communication with sighted peers and teachers in the classroom, did so because of the difficulty they experienced in performing independently the classroom activities such as note taking and answering questions.

MacCuspie (1996) argues that low vision imposes limitations on the ease with which children acquire information about their peers, and activities; which in turn, affects their ability to develop physical and social skills. Again, section (4.1) of the analysis indicates that the children's vision can not adequately support them in activities which require use sight. Their communication with sighted peers and teachers therefore, may have been motivated by the need for them to be helped in such activities. A study carried out by Ruffman (1998) found that peer relationship may affect children's cognitive development both directly, by offering a unique context for guided participation in learning activities, and indirectly, by providing opportunities for the children to observe interactions among older siblings and their peers.

It may be argued that ability of the CWLV to participate in dialogue with the sighted peers and teachers may partly depend on the nature of activities and the kind of support they need from them. For instance, dictating notes involves talking; if sighted peers and teachers accept to help the CWLV in such an activity, the CWLV may acquire communication skills such as turn taking and active listening. Together, they can discuss spellings, pronunciations and meanings of words in the process of dictating the notes. Such an activity therefore may provide a forum for the children to make fun and communicate more effectively with the people helping them in the

activities; as a result it may boost their social participation. As for Vicky (2), her leadership position may not only expose her to talk to the classmates and teachers more freely, but also contribute to her socio-emotional development.

In spite of being an orphan as well as the oldest pupil (18 years old) among the CWLV, It was found that the children identified themselves more with their closer friends in the school during break time. The children's talk during this period centred on salutation, meals and reflection on previous lessons/assignments. They mostly talked about going to take porridge because all the CWLV were resident in the school; porridge was reported as their daily menu for breakfast. Break time therefore, provided a forum for the children to share experiences and socialize with their peers. Such a practice could eventually improve their relationship, and enable them interact more freely among themselves and with their teachers.

The children reported different levels of involvement and participation in the classroom activities identified, and that their limited vision did not hinder their involvement. Daniel (1) honestly acknowledged not only his strengths in sports and other games, but also weakness in debate. The concept of participation and involvement in this case, is similar to what Corn (1987) refers to as practical knowledge. In her opinion, children's participation leads to identity, relationships and interesting life activities (ibid. 1987). Daniel's weakness in debate might be a result of limited motivation for the activity, an issue which his teachers might need to reflect on because it could provide opportunities for the children to make friends and gain confidence in communicating with other people both at the school and in the outer community. Jane & Cheryll (2006) reported a similar finding about children's weaknesses. They revealed that teachers understood the visual limitations of the child whom they studied, and saw beyond his disability to capitalize on his learning strengths. They also encouraged socialization with his peers through the use of co-operative learning strategies.

The ideas about practical knowledge could be useful for the CWLV in this study as well. If teachers and capable peers do not help the CWLV overcome their social

weaknesses, they may not improve in any activity they attempt to do. The other CWLV mainly talked about story telling and related activities because they were in the middle class (primary four), a class in which pupils are less restricted to the use of vernacular for interaction and communication. Positive reinforcements during the activities as Irene (4) reported help to build confidence in the CWLV as well as contribute to their acceptance by the classmates. Grace (3) experienced mixed reaction from the classmates possibly because either some of them had conflicting interests, or others did not enjoy her stories. Whereas it is appreciated that people have different tastes for particular stories and other activities they are engaged in, recurrence of the behaviour to a particular child with low vision might frustrate the child's effort in this respect.

5.1.2 Participation in games and play

The findings indicate that some of the CWLV were interested in different games played together with the sighted peers at school. As noted in the analysis, other CWLV seemed to demonstrate preference for games played with particular children. At the same time, Saviour (5) did not want to play with sighted peers. The children's participation in games with their sighted peers is similar to the concept of guided participation. Rogoff (2003) emphasizes that development of individuals is exhibited by their participation in the community, engaging with others in shared endeavours. As the CWLV play with their sighted peers, they learn from one another. They also get necessary support and develop stronger relationship, which eventually facilitates their social functioning. As for Saviour who did not like to play with sighted peers, it might be assumed that the situation was dictated upon by his visual limitations, discomfort due to the pain he experiences in his eyes and the occasional epileptic attacks. Low vision seems to impose limitations on the ease with which children acquire information about their peers and activities (MacCuspie 1996). This in turn, affects their ability to develop physical and social skills. Therefore, it might be argued that the children who showed interest in playing games with their sighted peers did so because they had mild cases of low vision besides being sociable to their colleagues.

CWLV were able to fit and engage in various social activities done in the school in collaboration with their colleagues with visual impairments. In spite of the difficulties in seeing, their functional vision seems to help them participate in some of the games identified. Similarly, Jane & Cheryl (2006) report that, the student whom they studied was able to play in an environment where he was on an equal footing with his peers visually. These happy experiences made him develop relationships with children who faced similar challenges. Playing with peers who experience similar visual challenges could help CWLV understand one another in terms of abilities and limitations in particular activities. This could eventually enable the CWLV help themselves where necessary instead of relying solely on teachers and sighted peers.

According to the findings, some teachers in the school involved the CWLV in activities aiming at their socialization. As Vygotsky (1978) has noted, children acquire a variety of information by imitating adults and being instructed about how to act. In the same way, Rogoff (2003) clarifies that children learn from their opportunities to observe and adults often expect them to learn through watching. The teacher's intervention in children's games could help strengthen relationship among the children. It also provides them with security and opportunity to learn new skills in games demonstrated to them. It was mentioned in the previous chapter (chapter four) that the CWLV were guided by some particular teachers in the games. In order to maximize the children's potentials in such activities, it might be necessary for all teachers working with the CWLV to show positive feelings and associate with them in some of the games played at school. Teacher's guidance would then help in improving the children's social participation as well as their personality development.

While some of the children (Daniel (1) and Grace (3)), reported playing alone besides games which involved other people, Saviour (5) and Vicky (2) were more comfortable with games that involved other colleagues. Irene however, did not give her opinion. There could be some inborn reasons which motivated Saviour (5) and Vicky (2) to conform to solitary play. A possible reason could be conflict of interest

among the CWLV in some of the social games; or perhaps, they played such games only when they were lonely.

The children's opinions about playing alone or in a group as reported in (4.3.6) show that they preferred playing games with peers to individual games. Hundey & Cohen (1999) observe that activities that require good physical development and agility are closely associated with social groups and that the number of mutual friends as well as peer social standing contribute to children's overall social adjustment. It is interesting to note that children who reported playing alone, later on preferred social games. The reason for their preference was the opportunity to get more friends and break boredom among others pointed out above (ibid. 1999). The children's opinions in this regard show that they are willing to participate in group activities if given chance and necessary support by teachers and sighted peers in the school.

Time for playing games seemed to be decided by individual child or group that found it necessary to do so. Playing in the afternoon meant that the games were either self initiated or programmed by the school to be performed at such a time. It also implies that during morning hours, children were engaged in lessons and other academic activities. Much as the games played in the afternoon were mostly those that were self-initiated and out-of-class, the extent to which the children were involved in games within classrooms remains unclear. It might therefore be argued that the CWLV did not have enough opportunity to play with their classmates during lessons until break time elapsed. This however, may eventually hinder their learning due to over concentration on academics at the expense of leisure.

5.1.3 Co-operation and support

The help given to CWLV by sighted peers and teachers in movement reflects the variation in the degree of visual loss each of them had. As highlighted earlier, the children had some useful residual vision which could support their performance in tasks including movement. Consequently, they did not require much guidance by the peers and teachers during the day. Daniel (1), Vicky (2), Grace (3) and Saviour (5) needed more help in the evening because their sight did not support them in dim light.

Nevertheless, as Corn (1987) has noted, the needs of CWLV are similar to those of children who are blind (people with complete loss of vision); they are often unnoticed in various ways; for instance, both individuals will need to have street signs announced when travelling. Teachers and some more capable peers could co-operate in this case by giving clear instructions to the CWLV, making simple modifications in the school environment using land marks, shore lines, contrasting colours and if possible, lighting darker areas of the school/classrooms (Heather & McCall 2001). It may be helpful for teachers and sighted peers to recognize the difficulties CWLV experience when they are walking in the school environment and give them the necessary support.

Some of the teachers and sighted peers helped the CWLV by dictating notes, showing them correct spellings, pronunciation of certain words and Braille examinations among others. This seems to show that they understood the limitations of the CWLV in those activities. The idea of support to children is emphasized in Vygotsky's concept of mediation which focuses on expansion of the learner's zone of proximal development. In this case, Vygotsky points out that mediation provides the learner with insights into him/herself as a learner, provides the learner with insights into the effectiveness of the learner's present capabilities, processes and strategies; and, enhances the transference of learning into new situations which the learner will encounter; hence, increasing the capacity of the learner to scaffold (support) and mediate their own learning in future (Lisbeth 1992).

Much as teachers are directly responsible for mediating the classroom activities in which CWLV are engaged, co-operation among them and the children is crucial. Again it may however; be argued that, some teachers may not show willingness to co-operate in helping the CWLV perform the stated classroom activities. Some of them may instead, capitalize on their lack of training and limited experience working with such children. Such a conflict might leave the CWLV un-attended to in the classroom activities. As a result, they may not be able to participate fully in such activities.

Further more, the findings show that the CWLV experienced less difficulty securing help from their teachers and sighted peers in locating text and non-text book materials they needed. The CWLV clarified that most of the books they used were written in Braille; this implies that the contents of the books could be interpreted only by themselves or the two special needs trained teachers in the school. At some moments, it became difficult for the ordinary peers and teachers to locate the books which the CWLV wanted to read. Corn (1987) emphasizes the need for teachers and sighted peers to help CWLV during various activities; for instance, when children in a class are to locate a book in the library, the child with low vision could also be helped to explore and identify the books he/she needs instead of expecting the books to be availed all the time by the teacher. She says due to lack of exposure, the student is deprived of the opportunity to explore the library and retrieve a book as well as benefit from the incidental information and interactions that occur naturally. Hence, Feuerstein (1990) identifies two types of learning situations to which children are exposed; the first being *direct learning*. This includes an unmediated interaction between learning material and the child's mind. The second type of learning, the *mediated* one, becomes important if the child does not know how to accept the material, cannot identify its meaning, or does not know how to respond (ibid. 1990).

CWLV may be able to locate materials with less difficulty if necessary modifications identified in paragraph one (5.4) such as: arranging the library materials orderly in sections, labelling the sections using large print and in Braille, proper lighting and other modifications are in place. Teachers and some capable peers could mediate by describing the library materials for the CWLV in detail and guiding them on how to use them. Nevertheless; the teachers' lack of training and experience in the area of low vision, might have hindered their efforts to provide such help to the CWLV. Similarly, the sighted peers and such teachers without training in the area of visual impairment possibly did not know much about the special non-text book materials and other equipment needed by the CWLV. The initiatives taken by some of the CWLV indicate that they did not depend entirely on their sighted colleagues and teachers during all the activities they participated in. It was amazing that the CWLV

themselves also took initiative to provide assistance to the teachers and some of their sighted peers who helped them both in lessons and during free time (reading Brailled text to the class (Daniel), sharing pancakes with friends (Saviour)) among others. In a similar study, Jane & Cheryll (2006) found that note taking, in particular, was a co-operative activity which provided the child with low vision whom they studied opportunity to help his classmates who dictated notes for him by printing out two copies of the work he typed on computer, one for each of them. The co-operation made him gain popularity among his sighted peers in the regular classroom.

To some extent the children's initiatives show that they are willing to collaborate with their sighted peers and teachers in various social activities in which they participate while at school. Whatever little assistance they give to the ordinary members of the school community may improve their relationship as well as acceptance in school/classroom activities. It is important that the children be rewarded for whatever little contribution they make in order to maintain the relationship. Schinazi (2007) observes that feedback allows for the control and organization of actions and provides checks on behaviour; thus, delivery of feedback is crucial during such activities and can have an effect on one's sense of identity, self-concept and esteem. Similarly, Wagwau (2008) notes that negative statements of any kind lower the child's self-esteem and make him or her vulnerable to fear and self-doubt. It is true that some CWLV are generally vulnerable to criticisms; the above observations are acceptable because they aim at building the children's confidence, while at the same time motivating them to act in a more positive way when they are together with their peers and teachers at school.

5.1.4 Difficulties experienced by children with low vision

Teasing was the main difficulty as well as a challenge the CWLV encountered when talking to some of their sighted colleagues and teachers. This implies that stigma still prevails among the ordinary children and teachers in spite of the support some of them provided to the CWLV. In a similar study, Alenyo (2001) found that while social acceptance was accorded to CWLV in the schools which were involved in his

study; mistreatment and stigma were evident among some teachers and other people in the school. He indicates further that, some sighted children tried to show interest in interacting and playing with CWLV, but others teased and isolated them. Such a situation may hinder the children's social participation as it makes them in some cases; withdraw from the activities due to the stress.

During games and play with the sighted peers, it was found (in section 4.5.2 of the analysis chapter) that teasing remained an outstanding threat to the children's social participation. To some of the CWLV like Grace (3), Daniel (1) and Vicky (2), teasing seemed to be experienced as a way of making fun. The negative extreme nevertheless, stressed them, as was the case for Saviour (5). In addition, some of the CWLV complained of the play ground being unsafe for them because it had many obstacles and sharp objects which could harm them.

Poncillia (2002) acknowledges the contribution of games and sports in facilitating the development of positive self-esteem, building social skills and friendships, and providing pleasure among CWLV. In support of this notion, Hundey & Cohen (1999) point out that lack of participation in sports and recreational activities could limit peer interactions and friendships; thus, a negative impact on the children's self-worth. These views imply that without participating in games and play as a result of teasing and the unsafe play ground, CWLV might become social misfits in the school. Eventually, some of them who are worst affected by the problem may drop out of school. Back to the play ground, CWLV can only play with confidence when they are assured of safety in an environment which is better adapted to suit their needs. The play ground could be modified by removing sharp objects in it, demarcating activity areas using strings, pegs as well as other suitable materials with good contrast for easy identification by the children. Again, it can be argued that without clear instructions by the teachers and sighted peers, children with severe low vision may not participate effectively in the games. Use of a combination of verbal and gestural instructions by teachers and sighted peers may be necessary in this case. Such techniques call for training and re-orientation of the teachers and capable peers working with CWLV in the school.

The findings above point to the techniques of improving participation of CWLV. Bad handwriting of some teachers on the chalkboard made it difficult especially for Irene (4) to recognize what ever they wrote. Other difficulties were associated with negligence of some teachers to involve her in answering questions, and failure to respond to the request by the CWLV as reported by Daniel (1). Besides lack of training and experience, the findings imply that such teachers were seemingly less interested as well as lacked motivation to work with the CWLV in their classes.

The experiences of the CWLV indicate that they were helped only by a small fraction of their sighted peers. This was exhibited by the sighted peers' rejection to lend notes to their colleagues with low vision, hesitation in conversation with the CWLV as well as shutting them down whenever they attempted to read what was written on the chalkboard as earlier on presented in the analysis chapter, section (4.5.5).

In spite of these negative findings, Rogoff (2003) points out that, children, caregivers and other companions jointly structure the situation in which children are involved through choice of activities which children have access to and engage in, as well as through in-person shared endeavours. They include conversations, recounting of narratives and engagement in routines and play. On the one hand, Rogoff's ideas in mutual structuring of participation (one of the distinct forms of guided participation) provide CWLV among their sighted colleagues the opportunity to exploit their potentials as well as enable them choose the classroom activities which suit them. On the other hand, the lack of co-operation demonstrated by some of their sighted peers might lower their morale and create a social distance among them and those sighted peers in the classroom. Nevertheless, some of the sighted peers and committed teachers who endeavour to help the CWLV in the classroom activities could become mentors to the CWLV and the pessimistic peers. This could gradually help reverse the situation by boosting their participation in social activities.

To some extent, the difficulties CWLV experienced in interaction and communication, games and play as well as co-operation and support restricted their social participation in the school. In order to be secure, some of the children had to

withdraw from some games and other activities which they could have played together with their sighted peers, given that the play ground was not safe for them. Amazingly, Daniel (1) dealt with the situations he encountered in a more positive way by doing persistently, what he felt would be acknowledged by the ordinary members of the school community.

The children's withdrawal from participating in some of the activities may delay the development of their communication and play skills. Similarly, Parsons (1986) found that children with low vision were delayed in the development of play skills when compared to normally seeing peers. They lagged behind in knowing the function of objects or how to play with them.

Given the necessary assistance and facilities by teachers and sighted peers, the CWLV might find it easier to fit and participate in various social activities in the school. On the contrary, lack of or insufficient provision of assistance and required facilities for games might continue to demoralize some of the CWLV; hence, a hindrance to their social functioning in the school.

5.2 Concluding Remarks

Participation of the CWLV in social activities was influenced by various factors. The factors which motivated the CWLV to interact and communicate with their sighted peers varied from one child to another; at the same time, some of the factors seemed to cut across all the children studied. The positive factors include interpersonal relationship and the need for help from sighted peers and teachers. Some of the CWLV seemed to be less motivated to participate in social activities due to stigma caused by some sighted children and teachers. This was manifested through teasing and lack of interest by some of the sighted peers and teachers to engage them dialogue during lessons and leisure time at school.

In spite of the difficulties experienced, the CWLV were eager to participate in games and play in the school. Such games were either self-initiated and performed at an individual level or group-initiated. Although some of the children liked individual

play, they still held positive opinions about games which involved their peers as well as teachers.

Co-operation and support services existed among some of the CWLV and other members of the school community. The help they received depended on the nature and degree of their visual loss. As stated earlier, the children's vision supported movement and some simple tasks which require the use of sight; consequently, guidance was not a pre-requisite for them in movement within the school to perform the daily living tasks, except in the evenings when darkness approached. The areas of co-operation and help received by the children include: note taking, braille examinations and transcribing (interpreting the brailled work for print readers) and locating text/non-text book materials among others. I should note here that, whereas there are no statistical figures to determine the extent of the support in this case, the findings seem to show that only a small sector of the peers and teachers were willing to provide it while others simply resisted.

Limited involvement and co-operation shown by some sighted peers and teachers to the CWLV in interaction/communication as well as games restricted the children's effort to participate in such activities. Besides, the majority of teachers in the school lacked training and experience working with CWLV. It therefore, became difficult and challenging for some of them to help CWLV especially in the classroom activities.

Some of the CWLV who could not tolerate the difficulties, withdrew from participating in the activities and sought their own ways self satisfaction. This in turn, hindered their social functioning in the school. The older CWLV managed to overcome the situation by ignoring some of the difficulties and seeking their teachers' intervention to resolve conflicts which arose among them and their sighted peers.

5.3 Recommendations

Various factors which influence participation of CWLV in social activities have been identified and discussed in this study. The recommendations focus on:

educational/functional assessment of CWLV, teacher training, creating a welcoming environment, use of positive feedbacks, physical modifications and future research.

5.3.1 Educational/functional assessment of CWLV

Assessment of CWLV aims at establishing the level at which they function as well as helps to design appropriate strategies for them in particular or all aspects of their lives. In order to maximize participation of CWLV in social activities, it is suggested that assessment of the children's visual performance be done regularly. This may involve a multi-disciplinary team which includes teachers, specially trained ophthalmologists, optometrists, social workers, nurses, occupational therapists, vision rehabilitation therapists, counsellors, orientation and mobility specialists and others. As Amanda (2004) has noted, it might also be necessary to address other skill areas in assessment and intervention practice. This might provide the child with a consortium of skills which might be useful for their functioning at school. For the teachers however, it may be more useful to focus more on the various conditions under which the CWLV function rather than using the assessment reports to label and merely place them in the school. In addition, they could use encourage CWLV to use their remaining senses and the residual vision to help them participate in social activities at school.

5.3.2 Teacher training

Teachers play an important role in helping CWLV to be involved in various activities at school in collaboration with the sighted peers. Therefore, training of the teachers who have limited knowledge in the area of low vision might be of great help to the CWLV. This could be school-based, through refresher courses organized by ministry of education and sports, or pre-service programmes. The training may equip the teachers with skills which they can use to help the CWLV not only in academics but also social aspects of the school programmes. Teachers may eventually be in a better position to cater for the social needs of the CWLV by designing appropriate activities for them during classroom and out door activities. Similarly, teachers may acquire

necessary skills of guiding and counselling the CWLV who withdraw from group activities due to stigma and related difficulties they encounter in the school. Such services may help the CWLV cope with the challenges and participate more freely in social activities in the school. Such training could be made more meaningful by emphasizing reflection on the knowledge and skills acquired. The reflection could be based on what, why and how a particular knowledge or skill is presented. Eventually, such teachers may become more capable and innovative in their approaches of helping CWLV participate in social activities in the school.

5.3.3 Use of appropriate feedbacks

One way of improving participation of CWLV in social activities could be by acknowledging their efforts. This could be done through verbal praise or materially. Teachers and other sighted peers are directly responsible for the provision of such positive feedbacks since they are often closer to CWLV in the school. A child with low vision, who is regularly rewarded for whatever little positive attempt he makes, may eventually rediscover his or her esteem and become a full participant in various activities which take place in the school.

5.3.4 Physical modifications

The children's effective participation may be noticed in an environment which is free from physical as well as social barriers. The physical aspects of the school environment could be modified for CWLV by creating land marks (points of reference) and shorelines in the school compound to ease movement, demarcating activity areas, appropriate lighting, and large print/Braille labels to ease exploration and identification of objects.

5.3.5 Creating a welcoming environment

Teachers should create a welcoming environment for all children so CWLV may feel accepted in the school/class; thereby enabling them to participate in given activities together with their sighted peers without hesitation. They could do so by counselling the CWLV about their impairment, potentials and needs; as well as creating

awareness among the sighted peers so they may eventually understand and accept their colleagues with low vision. The social and educational components of care for children with low vision, such as training and counselling other people in the school may include activities such as informing peers of the visual abilities of their classmates with low vision, and convincing the head of a the school to include a child with low vision (Faal & Qureshi 2007, p. 48).

5.3.6 Strengthening co-operation among CWLV and sighted peers

CWLV and the sighted peers may benefit more from one another if they work together in various social activities at school. Activities such as note taking, conversation games and other routines may become easier for CWLV if their sighted peers show willingness to co-operate with them. Similarly, sighted children may learn more from the CWLV by sharing ideas with them through informal and formal discussions, play, story telling and manipulation of special materials which CWLV use for learning and play. Such materials may include large print books with attractive colours, Perkins Braillers, goal ball, Show down and many other materials which they can teach their sighted peers how to use or play with. CWLV need to exploit whatever talent they possess, given the opportunity. All these might help bridge the social gaps among CWLV and enable them reach their ZPD. Co-operation therefore, may foster the spirit of togetherness among the children; and enable them function fully as members of one family without discrimination while at school.

5.3.7 Collaboration with different stake holders

The task of helping CWLV might require a union of different stake holders, each of whom has an important role to play. The various groups of stake holders may include teachers, pupils, parents and specialists as listed in 5.3.1 above. Teachers in particular, could cherish team work in planning, designing activities as well as guiding and counselling the CWLV so they may perceive school as a home. When the CWLV return to their families, parents and siblings could also engage them in the activities of daily life such as cooking, cleaning compound and exposing them to the

home environment so they may acquire more skills; which when demonstrated, could be valued by members of the community.

REFERENCES

- Alenyo, D 2001, 'Quality of Teaching Children with Low Vision in Regular Classrooms in Uganda', Master thesis, University of Oslo.
- All About Vision 2007, 'How to Cope with Low Vision', *Online Journal of Visual Impairment*, viewed 16 February 2008, <http://allaboutvision.com/>.
- Amanda, LH 2004, 'Relating Functional Vision Assessment, Intervention, and Outcomes for Students with Low Vision', in *Visual Impairment Research: international society for low-vision research and rehabilitation ISL*, Online Publication Date 01 April 2004, downloaded January 20, 2008, <http://dx.doi.org/10.1080/13882350390486992>.
- APSEA Sports Manual 2003, viewed February 20, 2008, http://www.apsea.ca/APSEA_Sport_Rec_Manual.pdf.
- Arditi, A & Rosenthal, B 1998, 'Developing an objective Definition of Visual Impairment', in *Vision '96: Proceedings of the international low vision conference 1996*, Book I, ONCE, Madrid, pp. 50-53.
- Ary, D & Lucy, J 1990, *Introduction to Research in Education*, Harcourt Brace College Publishers, viewed 28 January 2008, <http://www.amazon.com/s?ie=UTF8&search-type=ss&index=books&field-author=Donald%20Ary&page=1>.
- Barraga 1964, *Increased Visual Behaviour in Low Vision Children*, New York, American Foundation of the Blind.
- Blodgett, LJ, Bowyer, W & Turk, E September 2005, 'Supporting Ethical and Professional Relationships in large Qualitative Studies', *Forum Qualitative Social Research*, vol. 6 no. 3 Art. 35, viewed January 23, 2008, <http://www.qualitative-research.net/fqs-texte/3-05/05-3-39-e.htm>.
- Borg, WR & Gall, MD 1989, *Educational Research*, New York, Longman.

-
- Bohman 1991; Headland, Pike & Harris 1990, 'Interpretive Validity', in JA Maxwell (1992), *Understanding Validity in Qualitative Research: Harvard educational review* 32 (3) ss. 279-300, vol. 62 no. 3, Harvard Graduate School of Education.
- Bryman, A 2004, *Social Research Methods*, 2nd Edn, Oxford, Oxford University Press.
- Cambridge Advanced Learner's Dictionary on line 2005, viewed 15 April 2008, <http://dictionary.cambridge.org/define.asp?key=15470&dict=CALD>.
- Corn, AL 1987, *Keynote Address to the Sixth Canadian Interdisciplinary Conference on the Blind Child*, Austin, The University of Texas.
- Corn, AL & Koenig, AJ 1996, *Foundations of Low Vision: clinical and functional perspectives*, New York, AFB.
- Dale, D 2006, *Population Sampling Methods for Research Studies: definitions and uses*, viewed 18 February 2008, http://www.associatedcontent.com/article/28368/population_sampling_methods_for_research.html.
- Faal, H & Qureshi, MB 2007, 'Training to meet the need for Refractive error services', *Community Eye Health Journal*, vol. 20, issue 63, September 2007.
- Feuerstein 1990, 'An Impact of Feuerstein's Theory in Education and Psychology', *ICELP Research*, viewed 15 April 2008, <http://www.icelp.org/asp/Feuerstein.shtm>
- Fraiberg, S 1977, 'Psychoanalytic model', in SZ, Sacks, LS, Kekelis & RJ, Gaylord-Ross 1997, *The Development of Social Skills for Blind and Visually Impaired Infants*, New York, A.F.B. Press, pp. 8.
- Gall, MD; Borg, WR & Gall, JP 1996, *Educational Research: an introduction*, U.S.A., Longman Publishers.

-
- Gall, MD, Gall, JP & Borg, WR 2007 *Educational Research: an introduction*, 8th Edn U.S.A., Pearson Education Inc.
- Government of Uganda 1995, *The Constitution of the Republic of Uganda*, Kampala, Government of Uganda.
- Hatano, G & Inagaki, K 2000, 'Domain-specific Constraints of Conceptual Development', *International Journal of Behavioural Development*.
- Heather, M. & McCall 2001, *Visual Impairment: access to education for children and young people*, London, David Fulton Publishers Ltd.
- Holbrook, MC 1996, *Children with Visual Impairments: a parent's guide*, Bethesda, Woodbine House.
- Hundey & Cohen 1999, 'Importance of Sports and Leisure', in *APSEA Sports Manual* 2003, viewed 20 February 2008, http://www.apsea.ca/APSEA_Sport_Rec_Manual.pdf.
- Huesmann et al. 1992, 'Social competence Training', *Juvenile Justice Bulletin* April 2000, viewed 17 April 2008, http://www.ncjrs.gov/html/ojjdp/jjbul2000_04_1/pag2.html
- Jane, LG & Cheryll, D 2006, 'The Psychosocial Experiences of a Student with Low Vision', *Journal of Visual Impairment and Blindness*, American Foundation for the Blind, March 2006.
- Janette, Y 2005, 'Insiders (Emic) and Outsiders (Etic): Views of Self, and Othering'. *Journal of Systemic Practice and Action Research*, vol. 18, No. 2, April 2005.
- Klein, PS, Feldman, R & Schlomit, Z 1996, 'Mediation in a Sibling Context: the Relations of Older Siblings' Mediating Behaviour and Younger Siblings' Task Performance', *Wiley Inter Science Journals*, Volume 11, Issue 4

-
- (December 2002), viewed 15 April 2008,
<http://www3.interscience.wiley.com/journal/101020002/issue>.
- Kozulin, A 2003 (Ed), *Vygotsky's Educational Theory in Educational Context*, Cambridge University Press.
- Kvale, S 1996, *Interviews: an introduction to qualitative research interviewing*, London, Sage Publications, Thousand oaks.
- Kumar 1999, *The Interview as a Technique in Research*, viewed 24 January 2008,
<http://etd.rau.ac.za/theses/available/etd.html>.
- Lincoln & Guba 1985, in N. Golafshani (2003), Reliability in Qualitative Research, *The Qualitative Report*, vol. 8 no.4, December, 2003, Toronto, University of Toronto.
- Lisbeth, DK 1992, *A Mediation Model For Dynamic Literacy Instruction*, Florida, University of West Florida.
- Lunsford, TR & Lunsford, BR 1995, 'Research Forum – The Research Sample, Part 1: Sampling', *American Journal of Prosthetics & Orthotics*, vol.7 no. 3
- MacCuspie 1996, Importance of Sports and Leisure, in *APSEA Sport Rec Manual* 2003, viewed 24 March 2008,
http://www.apsea.ca/APSEA_Sport_Rec_Manual.pdf.
- Matovu, IMK 2003, *History of Special Education in Uganda*, Kyambogo University, Unpublished.
- Maxwell, JA 1992, Understanding Validity in Qualitative Research, *Harvard Educational Review* 32 (3) ss. 279-300, vol. 62 no. 3, Harvard Graduate School of Education.
- Miller, P 1993, *Theories of Developmental Psychology*, 3rd Edn. New York, WH Freeman and Company.

-
- Poncillia 2002, Importance of Sports and Leisure, in *APSEA Sport Rec Manual* 2003, viewed 24 March 2008, http://www.apsea.ca/APSEA_Sport_Rec_Manual.pdf.
- Putnam, JW 1993, *Co-operative learning and Strategies for Inclusion*, Baltimore, Paul H. Brooks Publishing Company.
- Richards, L 2005, 'Handling Qualitative Data: a practical guide', *Forum Qualitative Sozialforschung / Forum: qualitative social research* [On-line Journal], 7(2), Art. 24, viewed 28 March 2008, Available at: <http://www.qualitative-research.net>.
- Robson, C 2002, *Real World Research*, A Resource for Social Scientists and Practitioner Researchers, Oxford, Blackwell Publishing Ltd.
- Rogoff, B 2003, *The Cultural Nature of Human Development*, New York, Oxford University Press.
- Rogoff 1990; Rogoff et al. 2003, 'Learning through Guided Participation in Cultural Endeavours', in B. Rogoff (2003), *The Cultural Nature of Human Development*, New York, Oxford University Press, pp. 286.
- Rubin and Krasnor 1986, 'Social Competence Training', *Juvenile Justice Bulletin* April 2000, viewed 17 April 2008, http://www.ncjrs.gov/html/ojjdp/jjbul2000_04_1/pag2.html
- Ruffman, T, Perner, J, Naito, M, Parkin, L & Clements, WA 1998, 'Older (but not younger) Siblings Facilitate False Belief Understanding, Developmental Psychology', *Wiley Inter Science Journals*, Volume 11, Issue 4 (December 2002), viewed 15 April 2008, <http://www3.interscience.wiley.com/journal/101020002/issue>.
- Rummel, RJ 1976, 'Social Behavior and Interaction', in RJ Rummel, *Conflict and War*, vol.2, Beverly Hills, CA, Sage Publications, viewed 3 March 2008, <http://www.hawaii.edu/powerkills/TCH.CHAP9.HTM>

- Sacks, SZ, Kekelis, LS & Gaylord-Ross, R J 1997, *The Development of Social skills by Blind and Visually Impaired Students*, New York, A.F.B. Press.
- Schinazi, VR 2007, *Psychosocial Implications of Blindness and Low Vision*, Center for Advanced Spatial Analysis, University College London, Royal London Society for the Blind (RLSB).
- Silverman, D 2000, *Doing Qualitative Research*, Thousand oaks London, Sage Publication, Ltd.
- Skjørten, MD 1997, *Concepts in Special Needs Education*, Kampala, UNISE.
- Strauss, A & Corbin, J 1998, *Basics of Qualitative Research*, London, Sage Publications.
- Takeshita, B 2008, *Developing your Child's Vision: a guide for parents of infants and young children with visual impairment*, Whilshire, Losangeles.
- The World Bank Group 2008, *Qualitative Methods*, viewed 31 March 2008, [<http://web.worldbank.org/>](http://web.worldbank.org/).
- Thorne, S 2000, *Data analysis in Qualitative Research*, Evidence Based Nursing, downloaded 12 February 2008, [<http://journals.bmj.com/>](http://journals.bmj.com/).
- UNESCO 2008, *EFA Global Monitoring Report*, Education For All by the year 2015 – Will we make it? Unesco Publishing, Oxford University Press.
- UNESCO 2002, Inclusive Education: definition, principles and implications, *Conference of the Ministers of Education of African Member states (MINEDAF VIII)*, Dar-Es-Salaam: Tanzania.
- United Nations Organization 1948, *Universal Declaration on Human Rights*, United Nations Organization, Art. 26.

University of Michigan Kellog Eye Center 2008, *Eye Conditions*, viewed 15 February 2008, <http://kellog.umich.edu/>.

VanBremen, JR & Chasnoff, IJ 1994, Policy Issues for Integrating Parental Intervention and Addiction Treatment for Women, in T. Lisa & MG Tullos (1994), *Topics in Early Childhood Special Education: substance abuse and early intervention*, Austin, PRO-ED.

Vygotsky, LS 1978, *Mind in Society*, Cambridge, MA: Harvard University Press.

Wadidi, RJ 2005, *Functional Vision*, Lecture Support Material, Kampala, Kyambogo University.

Wagwau 2008, 'Raising your child's Self-esteem', in *The New Vision, Uganda's official news paper*, Tuesday 22 January 2008

Warren, D H 1984, Psychoanalytic model, in SZ, Sacks, LS, Kekelis & RJ, Gaylord-Ross 1997, *The Development of Social Skills for Blind and Visually Impaired Infants*, New York, A.F.B. Press, pp. 7.

Webster, A & Roe, J 1988, *Children with Visual Impairments*, U. K., Routledge.

Yin, RK 1994, *Case Study Techniques, Design and Methods*, London, Sage Publications.

Yin, RK 1994, *Case Study Research: design and methods*, 2nd ed. Beverly Hills, CA: Sage Publishing.

APPENDIX II - Semi-structured Interview Guide for Children with Low Vision

Title: Social Functioning of Children with Low Vision: a qualitative study on factors which may affect participation of children with low vision in social activities

Introduction

- Introduction of the interviewer
- Explanation of the topic
- Purpose of the interview
- Personal information
- How old are you?
- In which class are you this year?
- What difficulties do you experience with your sight?

Interaction/Communication

What things do you talk to your school/classmates about?

- During lessons
- During break time

What do you do during classroom activities such as conversation, storytelling, debate, discussions etc.?

Who do you like most in the school?

What makes you like your friend more than other pupils in the school?

Participation in games/play

What kind of games do you like to play at school?

- With sighted peers
- With fellow children with low vision
- Alone

What do your playmates do to include you in the games?

Co-operation and Support

What kind of help do you get from the teachers and peers during:

- Movement within the school compound
- Classroom activities (note taking, group work, class demonstrations, etc)
- Games outside class
- Prep time

Difficulties

What difficulties do you experience?

- When talking to the sighted children in the school
- Playing with the sighted children
- Doing classroom activities such as note taking, exercises, etc.?

Coping strategies

How do you manage to overcome the difficulties experienced during these activities mentioned we have talked about?

Conclusion

Do you have anything to add to our interview?

Is there anything you can think of that I need to ask other children about?

Have you met any question during the interview which you did not feel comfortable answering?

APPENDIX III - Letter of Introduction from the University of Oslo



UNIVERSITY
OF OSLO

Department of Special Needs Education

P.O.Box 1140, Blindern
N-0318 Oslo
NORWAY

Your ref:
Our ref: 22/07 ST/db
Contact person: Denese Brittain d.a.brittain@isp.uio.no

Visiting address:
Helga Eng's Building
3rd and 4th floor

Date: June 5. 2007

Telephone: + 47 22 85 80 59
Telefax: + 47 22 85 80 21

FACULTY OF EDUCATION

TO WHOM IT MAY CONCERN:

This is to certify that **UYIRWOTH, Rhesas Hallary**, date of birth 24.04.1975, is a full-time student pursuing a course of study at the Department of Special Needs Education at the University of Oslo, Norway, leading to the degree of Master of Philosophy in Special Needs Education (M. Phil. SNE).

This is a continuous two-year programme run on the "sandwich" principle, which involves periods of study and field work/research in both Norway and the home country. The student has concluded the initial 11-month period in Norway and will be returning to the home country in July 2007 to continue full-time studies/research until 1 January 2008 when s/he returns to Norway for the final part of the degree. The period of study will be completed at the end of May 2008.

The main responsibility for supervising the research, developmental work and thesis remains with the Department of Special Needs Education, University of Oslo, Norway. However, we would kindly request that the relevant authorities give the student the access required to the schools and educational establishments necessary in order to undertake field work and research. We would also be most grateful for any assistance that is afforded to the student which enables her/him to carry out this work, particularly the use of facilities such as access to telephone, fax, e-mail, computer services and libraries at the various educational establishments.

Yours sincerely

Ass. Professor Steinar Theie
Academic Head of International Master's Programme
Department of Special Needs Education

Institutt for spesialpedagogikk
Det utdanningsvitenskapelige fakultet
Universitetet i Oslo
Norge

Department of Special Needs Education
Faculty of Education
University of Oslo, Norway

APPENDIX IV - Request for Permission to Carryout the Study

Uyirwoth Hallary Rhasas

C/o University of Oslo

P.O.Box 1140, Blindern

N-0318 Oslo (Norway)

Date: **20th July, 2007**

The District Education Officer,
Nebbi District Local Government,
P.O.Box 1 Nebbi

Dear Sir/Madam,

Re: Field work/Research

I humbly wish to draw your attention to the subject matter referenced. I am a full-time student pursuing a course of study at the University addressed above, leading to the award of The Degree of Master of Philosophy in Special Needs Education (M. Phil. SNE).

I am required to submit a thesis in partial fulfillment for the stated award. The title for my study is: Social Functioning of Children with Low vision; it will focus on factors which may influence participation of children with low vision in Social activities. It is a qualitative case study which is hoped to suggest some possibilities to bridge the social gaps among children with low vision in the school as well as improve on their levels of social participation.

This letter is therefore intended to request you to allow me carryout the study in some selected primary schools in your district.

I look forward to receiving your kind consideration.

Yours faithfully,

Uyirwoth Hallary Rhasas.

APPENDIX V - Letter of Request to the Headteacher

To: The Head teacher
Angal Girls' Primary and Blind Unit School
P.O.Box 114 Nebbi
Uganda

I have allowed Uyirwoth H. R.
to make his research at the
above unit.
ANGAL GIRLS' PRIMARY SCHOOL
NEBBI DISTRICT 10/10/2007

From: Uyirwoth Hallary Rhasas
C/o University of Oslo
P.O.Box 1140, Blindern
N-0318 Oslo
NORWAY
Faculty of Education

Date: 20th July, 2007

Dear Sir/Madam,

Re: Field work/Research

I humbly draw your attention to the subject matter referenced. I am a full-time student pursuing a course of study at the University addressed above, leading to the award of The Degree of Master of Philosophy in Special Needs Education (M. Phil. SNE).

I am required to submit a thesis as partial fulfillment for the stated award. The working title for my study is: "*Social Functioning of Children with Low Vision*"; mainly focusing on factors which may influence the children's participation in social activities. It will be a qualitative case study where Interview will be used as the main method. The informants will be children with low vision in the selected schools. It is hoped that the study will suggest some possibilities to bridge the social gaps among children with low vision in your school if any, as well as improve on their levels of social participation. This letter therefore informs you that your school is one of those chosen for the study and requests your office to allow me carryout the study in the school.

I look forward to receiving your co-operation in this matter.

Yours faithfully,
Uyirwoth
Uyirwoth Hallary Rhasas.

APPENDIX VI - Letter of Consent

Uyirwoth Hallary Rhesas
C/o Department of Special Needs Education
University of Oslo
P.O.Box 1140, Blindern
N-0318 Oslo
NORWAY
Jan 1st, 2007

Dear Participant,

Re: Letter of consent

You have been chosen as one of the participants for my study. The study concerns social functioning of children with low vision. I will particularly investigate the factors which may influence participation of such children in social activities. The information you provide will be valuable and will be used solely for the purpose of educational study. The information will also be kept confidentially.

You are therefore requested to participate by giving responses to the interview questions relating to the subject on an appointed date.

I look forward to receiving your kind co-operation.

Yours sincerely,



Uyirwoth Hallary Rhesas.

Participants:

OFOMUNGA DENIS

ACEN SCOVIA

Acen IRENE

OCAI BRIDGET.





APPENDIX VII - Sample Transcript of the Interviews

INTERVIEW 1

Child 01 (Pseudo name: Daniel) - Male

1 1 Personal information

1 2 Interviewer: *How old are you?*

1 3 Daniel: I am fifteen years old?

1 4 Interviewer: *In what class are you?*

1 5 Daniel: I am in primary six this year.

1 6 Interviewer: *Which groups of children study in this school?*

1 7 Daniel: The school has children with visual impairment, who are both girls and boys, 1
8 resident in the school.

1 9 Interviewer: *What kind of visual problem do you experience?*

1 10 Daniel: I experience difficulty seeing things at night or in dim light. During the
1 11 day I see at least with less difficulty except for printed materials at far distance.

1 12 Interviewer: *Did your parents take you to the hospital for medical examination the
1 13 first time this problem was identified?*

1 14 Daniel: No, my parents did not take me to any hospital for medical examination at 1
16 the onset of this problem. This year however, some eye specialists came from
1 17 Mulago hospital, Kampala and examined our eyes at the school.

1 18 Interaction and Communication

1 19 Interviewer: *I guess you stay with other people, would you please tell me the*

1 20 person you like to talk to most in the school?

1 21 **Daniel:** I like talking to a certain girl in my class. I converse with her almost every
1 22 day in my class; and also my colleagues who have visual problems, with whom I
1 23 share dormitory as well as the cooks in the school.

1 24 **Interviewer:** *What makes you like talking to these people more than the others in*
1 25 *the school?*

1 26 **Daniel:** I like talking to them because we are used to one another and we are now
1 27 very close friends. I also talk to other children a bit freely.

1 28 **Interviewer:** *When you talk to other people, how do they react towards the*
1 29 *conversation?*

1 30 **Daniel:** My conversation with them is fairly good; but some of them are so brief
1 32 that I can not talk to them longer than I need. They say a few words and go away
1 33 when I still want to talk to them. I remain with only those who are in good terms
1 34 with me.

1 35 **Interviewer:** *What do you talk to your peers about during classroom lessons?*

1 36 **Daniel:** During lessons in the class, I talk to my colleagues about answering
1 37 questions. When I fail to get the answer to a particular question, I ask my colleagues 1
38 and they tell me what it is. Also when I want to copy some notes, I ask them to lend 1 39
me their books; I return their books after I have finished copying the notes.

1 40 **Interviewer:** *What about during break and lunch time?*

1 41 **Daniel:** During break and lunch time, I ask them to know how they are in the
1 42 morning and afternoon. We also ask ourselves about what the teachers taught that

1 43 day. Some of us may not have understood some parts of the lesson; so, we explain 1
44 to one another during break or lunch time.

1 45 Interviewer: *When you ask your colleagues, what kind of responses do you get*
1 46 from them?

1 47 Daniel: When I ask them, only a few of them answer in a good way; but others
1 48 instead, begin to tease me.

1 49 Interviewer: *What do you do in class during discussion, conversation, story telling, 1*
50 debate, etc.?

1 51 Daniel: During discussion in the class, when someone pronounces a word wrongly, 1
52 we argue while also making some fun together with the group members as we
1 53 attempt to find the right pronunciation. I ask questions and give answers where
1 54 necessary.

1 56 Interviewer: *Would you also say something about debate and story telling please?*

1 57 Daniel: Yes, I also tell stories in the class; but in debate, I participated only twice.

1 58 Participation in Games and Play

1 59 Interviewer: *Would you tell me the kinds of games you like play with your sighted 1 60*
peers?

1 61 Daniel: I like football game and athletics when their time comes. Sometimes I play 1
62 netball with girls, or run around the school compound with them. We also look for
1 63 the school rabbits and send them into their house.

1 64 Interviewer: *Can you also tell me the games you play with your colleagues with*
1 65 visual impairments?

1 66 Daniel: Together with my colleagues with visual problems, we play cards and

1 67 sometimes I used to run with them up hill. This term, we have not run because they 1
68 have not yet told me. Some of them are lazy.

1 69 Interviewer: *Can you think of some games you play with the help of your teacher?*

1 70 Daniel: Sometimes, we play chasing game together with our teacher. He does this 1
71 during time for free activity when he wants to make us active.

1 72 Interviewer: *You have told me the games you play with other people; is there any
1 73 game which you sometimes play alone?*

1 74 Daniel: The game I like playing when I am alone is athletics. On some occasions
1 75 when I am going somewhere and I see that I am going to be late, I start running. I
1 76 also make a ball and play with it alone. Sometimes when I go to the stream to bathe, 1
77 I start to play with water.

1 78 Interviewer: *When you consider these games, which one do you like playing most?*

1 79 Daniel: The best game for me is football.

1 80 Interviewer: *If you were to choose between playing alone and with other children, 1
81 what would you prefer?*

1 82 Daniel: I would prefer playing with other children to playing alone. This is because 1
83 when I am playing alone, I do not enjoy the game; with others you converse while
1 84 playing and it becomes enjoyable.

1 85 Interviewer: *During what time of the day do you play?*

1 86 Daniel: I like playing in the afternoon and early evening when the heat from the sun 1
87 is not strong anymore.

1 88 Interviewer: *Do your sighted peers willingly accept to play the games with you?*

1 89 Daniel: Yes, They do. When I see that I am going alone somewhere and ask them
1 90 to accompany me in the journey, they accept and we walk while playing with them

1 91 as well. It makes us reach the place where we are going very fast.

1 92 Interviewer: *How do your colleagues involve you in games like “playing cards”*

1 93 which you talked about?

1 94 Daniel: When we are playing cards, we sit together in a group of four and playing

1 95 while conversing also. In the event of one group being beaten for example, 3 – 0,

1 96 the members of that group who were playing badly are removed and other members 1

97 who were waiting to play are brought in. We rotate to allow others who want to

1 98 play get a chance.

1 99 Interviewer: *How do you feel when you are playing alone or with other children in 1
100 the school?*

1 101 Daniel: When I am playing alone, I get bored quickly; for example, when I am

1 102 playing football, I have to pick the ball from another end where I have kicked it.

1 103 But when I am playing with my friends, they help kick the ball back to me instead 1

104 of me going to pick it myself. This is why I find playing with my colleagues better

1 105 than playing alone.

1 106 Co-operation and Support

1 107 Interviewer: *What kind of help do you get from your sighted peers when you are*

1 108 walking in the school compound?

1 109 Daniel: When I am walking in the school compound, at times when I do not see

1 110 clearly, I keep on following the person with whom I am walking. My sighted

1 111 colleagues assist me and guide me in the evening, but during day time I walk

1 112 without a guide.

1 113 Interviewer: *Do you receive any help from the teachers as well when you are*

1 114 walking in the school compound?

1 115 Daniel: As for the teachers, they also know that I have problems with my vision;

1 116 so, when they see that I am getting lost or bumping into objects within the school

1 117 compound especially in the evening, they instruct and guide me to follow the right 1

118 path until I reach my destination.

1 119 Interviewer: *During classroom activities such as note taking, group work, class*

1 120 demonstrations, instructions etc., how do your sighted colleagues help you?

1 121 Daniel: These children help me when the teacher has put some notes on the

1 122 blackboard. They copy and later lend me their books after they have finished

1 123 copying. Again, they tell me what we are learning about. For example, when we

1 124 are learning about a leaf, they point to the parts of the leaf so I can see. That is

1 125 because the teacher will have already named those parts earlier for them.

1 126 Interviewer: *What kind of help do you receive from your teachers during the*

1 127 classroom activities mentioned?

1 128 Daniel: Teachers help me to explain what I have not understood when I ask them; 1

129 for example, spelling. Then they tell me “*This is correct or wrong*”. In copying

1 130 notes when the teacher is around, he dictates and we copy together with the sighted 1

131 children. But when the teacher is not around, I borrow notes from the sighted

1 132 children then I copy. When the teacher has come to teach, I ask him where I have 1

133 not understood and he tells me. This is done by most of my teachers. When

1 134 dictating notes, the teacher gathers all children with visual problems; he reads as

1 135 we copy with our Braille machines. Other teachers however, do not give us this

1 136 kind of help because they say they do not know how to help us.

1 137 Interviewer: *As concerns “searching for text books and other materials”; how do I
138 the teachers help you to find the text books you need and some other materials?*

1 139 Daniel: When I am searching for text books and other instructional materials in
1 140 the library, I go to the teacher and tell him “sir”, I need such and such a book. He
1 141 picks the book we want because the books are well labeled both in print and in
1 142 Braille. He reads the title in print while for us we check the contents in Braille. If
1 143 it is not the one we need, we take it back and he picks another one. This is because
1 145 the teacher does not know how to read Braille.

1 146 Interviewer: *When the teachers concerned with library are not available, how do I
147 your sighted peers help you to locate the books and other materials you need?*

1 148 Daniel: The sighted colleagues also help us when we go to the library. They do
1 149 the same thing as the teacher does. One time I went with a girl called Juliet P.7.
1 150 She willingly accepted to help me to look for a certain book in Social Studies.

1 151 Interviewer: *Can you tell me what you do to your sighted peers and teachers to
1 152 enable them help you willingly in the activities mentioned?*

1 153 Daniel: I also help other people. There was a time when the key to the library got 1
154 lost; our text books were in the dormitory. The teacher asked me to open to the
1 155 page where the topic about which we were learning was and made me read the
1 156 contents to the class. The teacher wrote what I read on the blackboard for sighted
1 157 children to copy in their books. I did this for three days until the library key was
1 158 found. Besides that, I help teachers to fetch water for washing their hands and for 1
159 drinking when they call me.

1 160 Challenges

1 161 **Interviewer:** *What difficulties do you experience when talking to your teachers?*

1 162 **Daniel:** When I am talking to teachers the difficulty I get is; when I ask them

1 163 about something and they fail to get the point, they answer me in a teasing manner.

1 164 This annoys me.

1 165 **Interviewer:** *How about your sighted colleagues?*

1 166 **Daniel:** Similarly, when I ask some children questions, they respond in different

1 167 ways and eventually disappear.

1 168 **Interviewer:** *Would you say a little bit more?*

1 169 **Daniel:** Another one is when we are playing with children, they start to recall what I

1 170 I do not want to hear; for example, they start to talk about my sight problems,

1 171 saying: “.... *You have joined this school for nothing, you are not blind; you have*

1 172 *only come to finish our beans?* This also annoys me and sometimes makes it

1 173 difficult for me to stay with those children.

1 174 **Interviewer:** *From whom do you get such comments?*

1 175 **Daniel:** I get this kind of problem from sighted children and some teachers. A

1 176 teacher once told me: “.... *You have only come to eat, you do not even attend*

1 177 *lessons yet you have not paid any money to the school*” This also annoyed me 1

1 178 to the extent that I was forced to go home and report to my parent who later came

1 179 and quarreled about it. That teacher did not forget the matter; he ended up

1 180 suspending me in second term for the same reason.

1 181 **Interviewer:** *When you ask your sighted colleagues for assistance, how do they*

1 182 *react?*

1 183 **Daniel:** Sometimes when I want to copy what the teacher has written on the
1 184 blackboard, some children refuse to lend me their notes.

1 185 **Interviewer:** *How about the teachers?*

1 186 **Daniel:** When I call the teacher to show me what I am not seeing clearly, he
1 187 sometimes says I am disturbing him. He also refuses to show us and we remain
1 188 only with what we have heard. This is a teacher who does not know how to help
1 189 people like us. Other teachers who know how to help us do not disturb us much.

1 190 **Interviewer:** *Do you experience any difficulty working with you colleagues with*
1 191 *visual impairments?*

1 192 **Daniel:** I do not experience any difficulty when I am working with fellow children 1
193 with visual problems.

1 194 **Interviewer:** *In your opinion, what do you think brings about the challenges you*
1 195 *have stated?*

1 196 **Daniel:** These problems come because sometimes they think I am only joking
1 197 about my condition or they think my father is too poor to acquire those things they 1
198 have.

1 199 **Interviewer:** *How do you manage to overcome the challenges you have*
1 200 *identified?*

1 201 **Daniel:** In spite of these challenges, I continue to do what is expected of me. I do 1
202 not care about what they do to me, I count them as being useless; also so that in
1 203 some years when I meet them, they might say: “Look, this person was once poor
1 204 but he used to follow what he was told”. That is why I always ignore whatever

1 205 they say, but instead try to do what is good. When they do such things to me, I do 1
206 not reply but say it is God who will judge them.

1 207 Coping strategies

1 208 **Interviewer:** *What do you do in order to overcome the challenges of participating I*
209 *in the various activities at school?*

1 210 **Daniel:** In order to overcome these challenges, I tell my colleagues when we are

1 211 together in a group “Let us do this so that if it turns out to be bad, we can find ways 1
212 of solving the problem together”. For example, when we are digging in the school 1 213
compound, I tell other children not to be idle; when some people are digging,

1 214 others could be sweeping so that we do not get tired. Afterwards, they tell me that 1
215 if only I had always been exposing them to this kind of experience, they would

1 216 have known how to work well. In order to overcome other challenges like

1 217 segregation, sometimes I decide to stay away from such children.

1 218 **Comments:** *Daniel looked initially shy when he was answering a question about*

1 219 *the person he liked to talk to most in the school; for instance, he looked down the*

1 220 *floor and kept playing with his fingers while I was asking him and when he was*

1 221 *answering verbally. After a short while however, he became confident and*

1 222 *listened attentively to the interviewer’s questions regarding Interaction and*

1 223 *communication. He then showed stability in his responses. Some children in a*

1 224 *nearby classroom*

1 225 *made some mild noise; nonetheless, it did not interrupt the interview.*

1 226 *His response to interaction during break time suggests that he takes initiative and I*
227 *is engaged in*

1 228 *group discourse with less difficulty.*

APPENDIX VIII - Codes used for Analyzing Data

Interaction and Communication

Codes:

- The person I like to talk to
- Why I prefer to talk to him/her
- Other people's reaction during conversation
- Talking to peers during lessons
- Talking to peers during break and lunch time
- Response by peers to my questions
- The child's involvement/participation during conversation, debate, discussion, instructions, etc.

Participation in Games and Play

Codes:

- Games played with sighted peers
- Games played with peers with visual impairments
- Games played under teacher's guidance
- Games played alone
- Preferred time for playing games
- Why get involved in the games
- Opinion about playing alone and in a group

Co-operation and Support

Codes:

- Help given by sighted peers in movement within the school compound
- Help given by teachers in movement within the school compound
- Help given to the child with low vision in classroom activities
- Help given by teachers in classroom activities
- Help given by sighted peers in classroom activities
- Help given by teachers to locate text books and other materials
- Help given by sighted peers to locate text books and other learning materials
- Help in games out side classroom
 - Help given by sighted peers in games out side classroom
 - Help given by teachers in games out side classroom
- The child's interest and willingness to help other people

Difficulties experienced

Codes:

- Difficulties experienced when talking
 - to sighted peers
 - to teachers
 - to fellow children with visual impairment

- Difficulties experienced during games/play
 - with sighted peers
 - with fellow children with visual impairment
- Difficulties faced when seeking for help during classroom activities
 - from teachers
 - from sighted peers
- Influence of the difficulties on the child's participation

Coping strategies

Codes:

- Overcoming difficulties in interaction and communication
- Overcoming difficulties in games
- Overcoming difficulties in co-operation
 - with sighted children
 - with fellow children with visual impairment

APPENDIX IX - Time Frame for the Study

Period Phase	Jan - June, 2007	July – Aug, 2007	Sept – Dec, 2007	Jan – April, 2008	May, 2008
Research Proposal	X				
Interview Guide	X	X			
Permission, Pre- visits, Piloting		X			
Data collection/Field Analysis			X		
Data analysis			X	X	
Building up the Thesis				X	
Submission of Thesis					X